

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT



<b>APPLICATION FOR PERMIT TO DRILL</b>						<b>1. WELL NAME and NUMBER</b> GMBU O-17-9-16			
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						<b>3. FIELD OR WILDCAT</b> MONUMENT BUTTE			
<b>4. TYPE OF WELL</b> Oil Well Coalbed Methane Well: NO						<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b> GMBU (GRRV)			
<b>6. NAME OF OPERATOR</b> NEWFIELD PRODUCTION COMPANY						<b>7. OPERATOR PHONE</b> 435 646-4825			
<b>8. ADDRESS OF OPERATOR</b> Rt 3 Box 3630 , Myton, UT, 84052						<b>9. OPERATOR E-MAIL</b> mcrozier@newfield.com			
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> UTU-64379			<b>11. MINERAL OWNERSHIP</b> FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			<b>12. SURFACE OWNERSHIP</b> FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>						<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>			
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>						<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>			
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b>			<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			<b>19. SLANT</b> VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>			

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	2051 FSL 440 FEL	NESE	18	9.0 S	16.0 E	S
Top of Uppermost Producing Zone	2361 FSL 94 FEL	NESE	18	9.0 S	16.0 E	S
At Total Depth	2628 FSL 219 FWL	NWSW	17	9.0 S	16.0 E	S

<b>21. COUNTY</b> DUCHESNE		<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 219		<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 20	
		<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 1455		<b>26. PROPOSED DEPTH</b> MD: 6152 TVD: 6080	
<b>27. ELEVATION - GROUND LEVEL</b> 6080		<b>28. BOND NUMBER</b> WYB000493		<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> 437478	

Hole, Casing, and Cement Information										
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
SURF	12.25	8.625	0 - 300	24.0	J-55 ST&C	8.3	Class G	138	1.17	15.8
PROD	7.875	5.5	0 - 6152	15.5	J-55 LT&C	8.3	Premium Lite High Strength	287	3.26	11.0
							50/50 Poz	363	1.24	14.3

**ATTACHMENTS**

**VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES**

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)	<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)	<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP

<b>NAME</b> Heather Calder	<b>TITLE</b> Production Technician	<b>PHONE</b> 435 646-4936
<b>SIGNATURE</b>	<b>DATE</b> 02/24/2014	<b>EMAIL</b> hcalder@newfield.com
<b>API NUMBER ASSIGNED</b> 43013528590000		
<b>APPROVAL</b>  Permit Manager		

**RECEIVED:** March 04, 2014

NEWFIELD PRODUCTION COMPANY  
GMBU O-17-9-16  
AT SURFACE: NE/SE SECTION 18, T9S R16E  
DUCHESNE COUNTY, UTAH

TEN POINT DRILLING PROGRAM

1. **GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

2. **ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

Uinta	0' – 3,740'
Green River	3,740'
Wasatch	6,270'
<b>Proposed TD</b>	6,152'(MD) 6,080' (TVD)

3. **ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:**

Green River Formation (Oil) 3,740' – 6,270'

Fresh water may be encountered in the Uinta Formation, but would not be expected below about 350'. All water shows and water bearing geologic units shall be reported to the geologic and engineering staff of the Vernal Office prior to running the next string of casing or before plugging orders are requested. All water shows must be reported within one (1) business day after being encountered.

All usable (<10,000 PPM TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth and adequately protected. This information shall be reported to the Vernal Office.

Detected water flows shall be sampled, analyzed, and reported to the geologic & engineering staff of the Vernal Office. The office may request additional water samples for further analysis. Usage of the State of Utah form *Report of Water Encountered* is acceptable, but not required.

The following information is requested for water shows and samples where applicable:

Location & Sampled Interval	Date Sampled
Flow Rate	Temperature
Hardness	pH
Water Classification (State of Utah)	Dissolved Calcium (Ca) (mg/l)
Dissolved Iron (Fe) (ug/l)	Dissolved Sodium (Na) (mg/l)
Dissolved Magnesium (Mg) (mg/l)	Dissolved Carbonate (CO <sub>3</sub> ) (mg/l)
Dissolved Bicarbonate (NaHCO <sub>3</sub> ) (mg/l)	Dissolved Chloride (Cl) (mg/l)
Dissolved Sulfate (SO <sub>4</sub> ) (mg/l)	Dissolved Total Solids (TDS) (mg/l)

#### 4. **PROPOSED CASING PROGRAM**

##### a. **Casing Design: GMBU O-17-9-16**

Size	Interval		Weight	Grade	Coupling	Design Factors		
	Top	Bottom				Burst	Collapse	Tension
Surface casing 8-5/8"	0'	300'	24.0	J-55	STC	2,950 17.53	1,370 14.35	244,000 33.89
Prod casing 5-1/2"	0'	6,152'	15.5	J-55	LTC	4,810 2.46	4,040 2.06	217,000 2.28

Assumptions:

- 1) Surface casing max anticipated surface press (MASP) = Frac gradient – gas gradient
- 2) Prod casing MASP (production mode) = Pore pressure – gas gradient
- 3) All collapse calculations assume fully evacuated casing w/ gas gradient
- 4) All tension calculations assume air weight

Frac gradient at surface casing shoe = 13.0 ppg  
 Pore pressure at surface casing shoe = 8.33 ppg  
 Pore pressure at prod casing shoe = 8.33 ppg  
 Gas gradient = 0.115 psi/ft

All casing shall be new or, if used, inspected and tested. Used casing shall meet or exceed API standards for new casing.

All casing strings shall have a minimum of 1 (one) centralizer on each of the bottom three (3) joints.

##### b. **Cementing Design: GMBU O-17-9-16**

Job	Fill	Description	Sacks	OH Excess*	Weight (ppg)	Yield (ft <sup>3</sup> /sk)
			ft <sup>3</sup>			
Surface casing	300'	Class G w/ 2% CaCl	138 161	30%	15.8	1.17
Prod casing Lead	4,152'	Prem Lite II w/ 10% gel + 3% KCl	287 935	30%	11.0	3.26
Prod casing Tail	2,000'	50/50 Poz w/ 2% gel + 3% KCl	363 451	30%	14.3	1.24

\*Actual volume pumped will be 15% over the caliper log

- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours
- Compressive strength of tail cement: 2500 psi @ 24 hours

Hole Sizes: A 12-1/4" hole will be drilled for the 8-5/8" surface casing. A 7-7/8" hole will be drilled for the 5-1/2" production casing.

The 8-5/8" surface casing shall in all cases be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.

#### 5. **MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:**

The operator's minimum specifications for pressure control equipment are as follows:

An 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOP's will be check daily.

Refer to **Exhibit C** for a diagram of BOP equipment that will be used on this well.

6. **TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:**

From surface to  $\pm 300$  feet will be drilled with an air/mist system. The air rig is equipped with a 6 1/2" blooie line that is straight run and securely anchored. The blooie line is used with a discharge less than 100 ft from the wellbore in order to minimize the well pad size. The blooie line is not equipped with an automatic igniter or continuous pilot light and the compressor is located less than 100 ft from the well bore due to the low possibility of combustion with the air dust mixture. The trailer mounted compressor (capacity of 2000 CFM) has a safety shut-off valve which is located 15 feet from the air rig. A truck with 70 bbls of water is on stand by to be used as kill fluid, if necessary. From about  $\pm 300$  feet to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCl substitute additive. This additive will be identified in the APD and reviewed to determine if the reserve pit shall be lined. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite

No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh aquifers.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

Newfield Production will **visually** monitor pit levels and flow from the well during drilling operations.

7. **AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

8. **TESTING, LOGGING AND CORING PROGRAMS:**

The logging program will consist of a Dual Induction, Gamma Ray and Caliper log from TD to base of surface casing @ 300' +/-, and a Compensated Neutron-Formation Density Log from TD to 3500' +/- . A cement bond log will be run from PBDT to cement top. No drill stem testing or coring is planned for this well.

9. **ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated

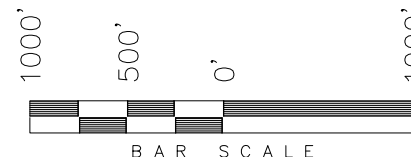
bottomhole pressure will approximately equal total depth in feet multiplied by a 0.433 psi/foot gradient.

10. **ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:**

It is anticipated that the drilling operations will commence the second quarter of 2014, and take approximately seven (7) days from spud to rig release.

BASIS OF ELEV; Elevations are based on an N.G.S. OPUS Correction. LOCATION: LAT. 40°04'09.56" LONG. 110°00'43.28" (Tristate Aluminum Cap) Elev. 5281.57'

WELL LOCATION, O-17-9-16, LOCATED  
AS SHOWN IN THE NE 1/4 SE 1/4 OF  
SECTION 18, T9S, R16E, S.L.B.&M.  
DUCHESE COUNTY, UTAH.



1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.



THIS IS TO CERTIFY THAT THE ABOVE PLAN WAS  
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS  
MADE BY ME OR UNDER MY SUPERVISION AND THAT  
THE SAME ARE TRUE AND CORRECT TO THE BEST  
OF MY KNOWLEDGE AND BELIEF.

No. 189377

10-10-13

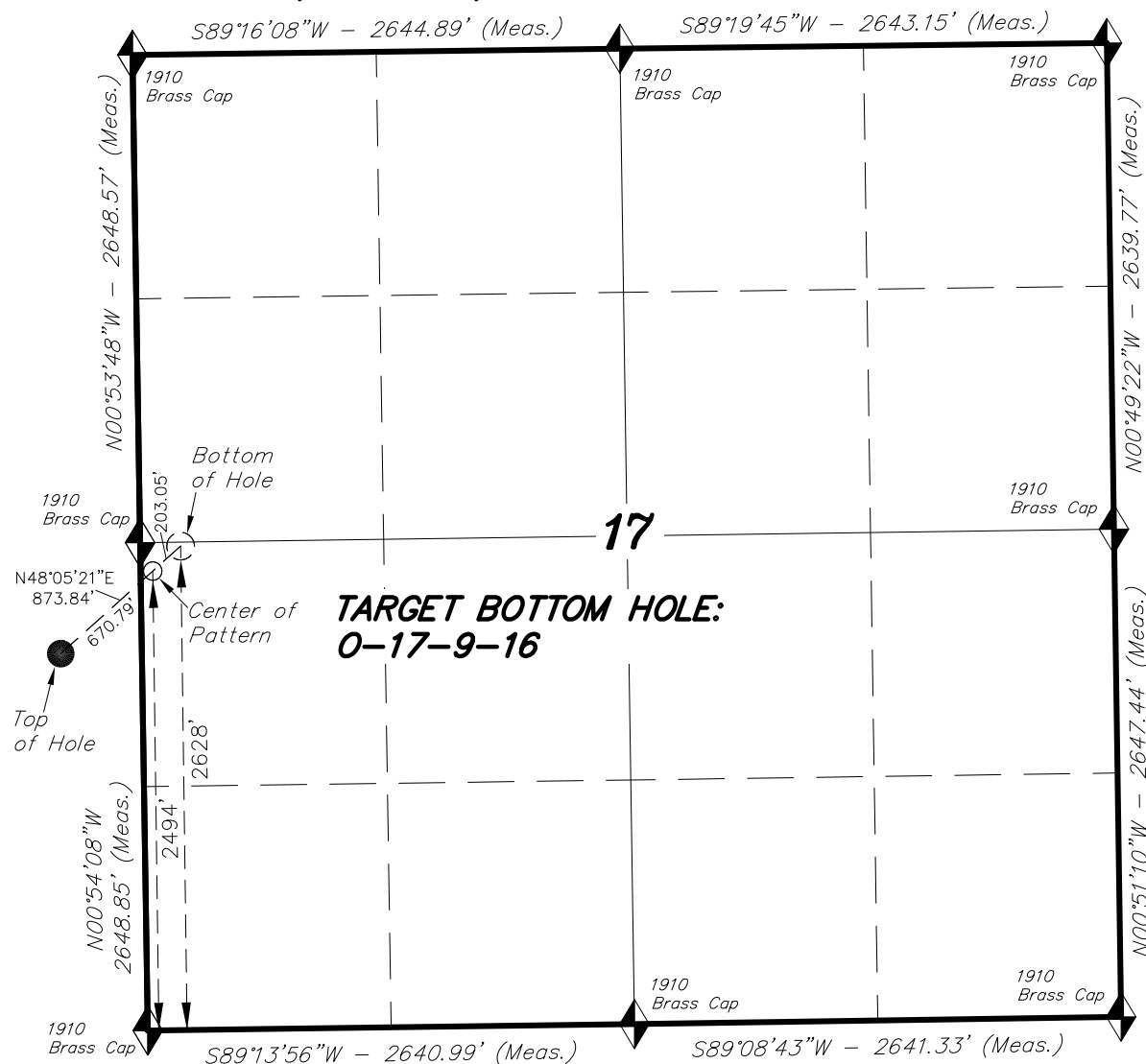
STACY W.

REGISTERED LAND SURVEYOR  
REGISTRATION No. 18637  
STATE OF UTAH

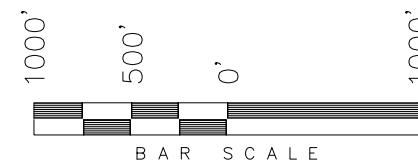
180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
(435) 781-2501

DATE SURVEYED: 09-26-12	SURVEYED BY: W.H.	VERSION:
DATE DRAWN: 10-10-13	DRAWN BY: L.K.	V1
REVISED:	SCALE: 1" = 1000'	

RECEIVED: February 24, 2014

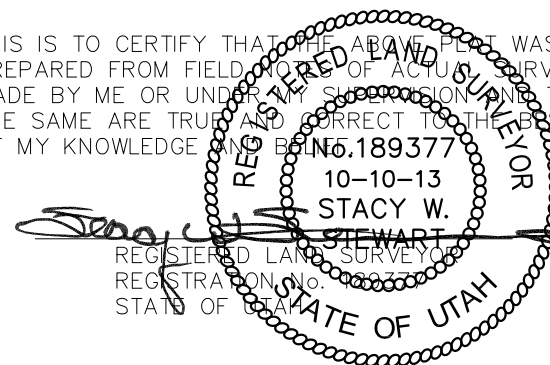
**T9S, R16E, S.L.B.&M.****NEWFIELD EXPLORATION COMPANY**

TARGET BOTTOM HOLE, 0-17-9-16,  
LOCATED AS SHOWN IN THE NW 1/4  
SW 1/4 OF SECTION 17, T9S, R16E,  
S.L.B.&M. DUCHESNE COUNTY, UTAH.

**NOTES:**

- Well footages are measured at right angles to the Section Lines.
- Bearings are based on Global Positioning Satellite observations.
- The Center of Pattern footages are 2494' FSL & 66' FWL.
- The Bottom of Hole footages are 2628' FSL & 219' FWL.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS  
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS  
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OF MY KNOWLEDGE AND BELIEF.



◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; Elevations are based on  
an N.G.S. OPUS Correction. LOCATION:  
LAT.  $40^{\circ}04'09.56''$  LONG.  $110^{\circ}00'43.28''$   
(Tristate Aluminum Cap) Elev. 5281.57'

NAD 83 (CENTER OF PATTERN)	NAD 83 (BOTTOM HOLE LOCATION)
LATITUDE = $40^{\circ}01'49.71''$	LATITUDE = $40^{\circ}01'51.03''$
LONGITUDE = $110^{\circ}09'08.61''$	LONGITUDE = $110^{\circ}09'06.64''$
NAD 27 (CENTER OF PATTERN)	NAD 27 (BOTTOM HOLE LOCATION)
LATITUDE = $40^{\circ}01'49.84''$	LATITUDE = $40^{\circ}01'51.16''$
LONGITUDE = $110^{\circ}09'06.06''$	LONGITUDE = $110^{\circ}09'04.09''$

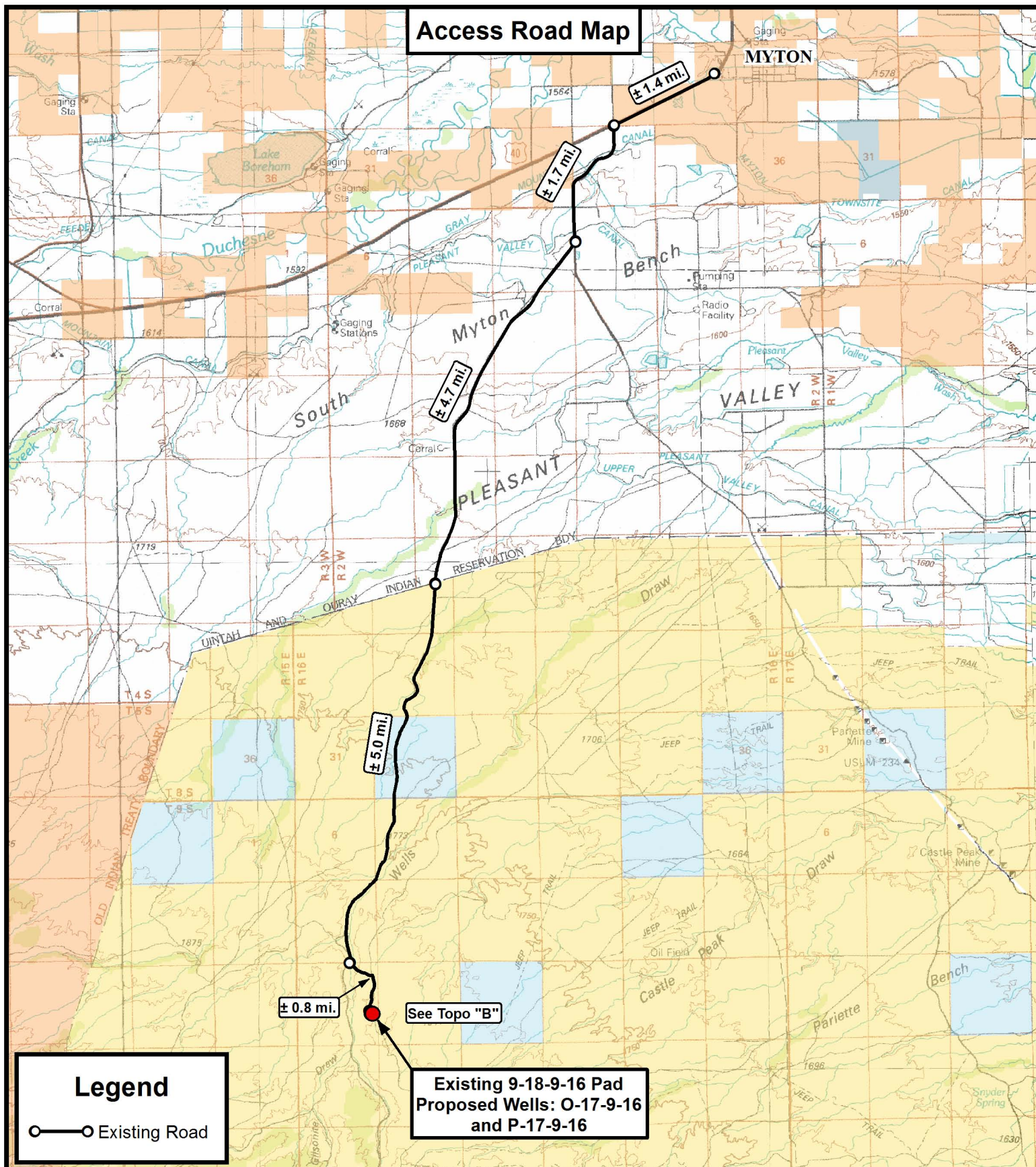
**TRI STATE LAND SURVEYING & CONSULTING**

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DATE SURVEYED: 09-26-12	SURVEYED BY: W.H.	VERSION:
DATE DRAWN: 10-10-13	DRAWN BY: L.K.	V1
REVISED:	SCALE: 1" = 1000'	

RECEIVED: February 24, 2014





180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501  
F: (435) 781-2518**NEWFIELD EXPLORATION COMPANY**

Existing 9-18-9-16 Pad  
Proposed Wells: O-17-9-16 and P-17-9-16  
Sec. 18, T9S, R16E, S.L.B.&M.  
Duchesne County, UT.

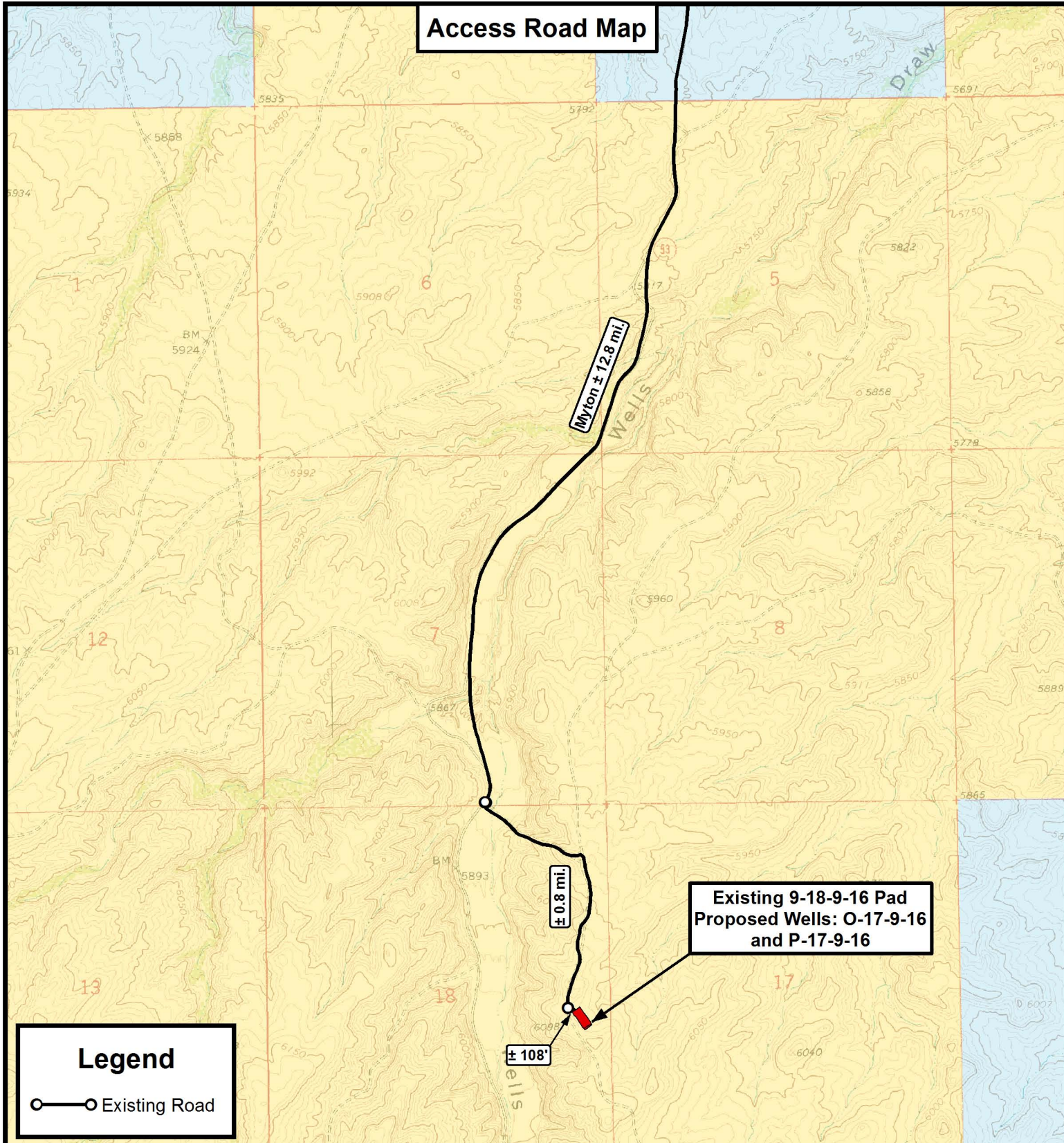
DRAWN BY:	A.P.C.	REVISED:	VERSION:
DATE:	10-15-2013		V1
SCALE:	1:100,000		

**TOPOGRAPHIC MAP**

SHEET

**A**



**Access Road Map**

THE PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY TRI-STATE LAND SURVEYING, INC. - TRI-STATE DOES NOT WARRANTY PROPERTY PARCEL DATA OR ANY ASSOCIATED INFORMATION. A PROPERTY SURVEY IS REQUIRED TO DETERMINE THE ACTUAL LOCATION OF PROPERTY LINES AND SHOW ACCURATE DISTANCES ACROSS PARCELS.

**NEWFIELD EXPLORATION COMPANY**

Existing 9-18-9-16 Pad  
Proposed Wells: O-17-9-16 and P-17-9-16  
Sec. 18, T9S, R16E, S.L.B.&M.  
Duchesne County, UT.

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SCALE:	1" = 2,000'		

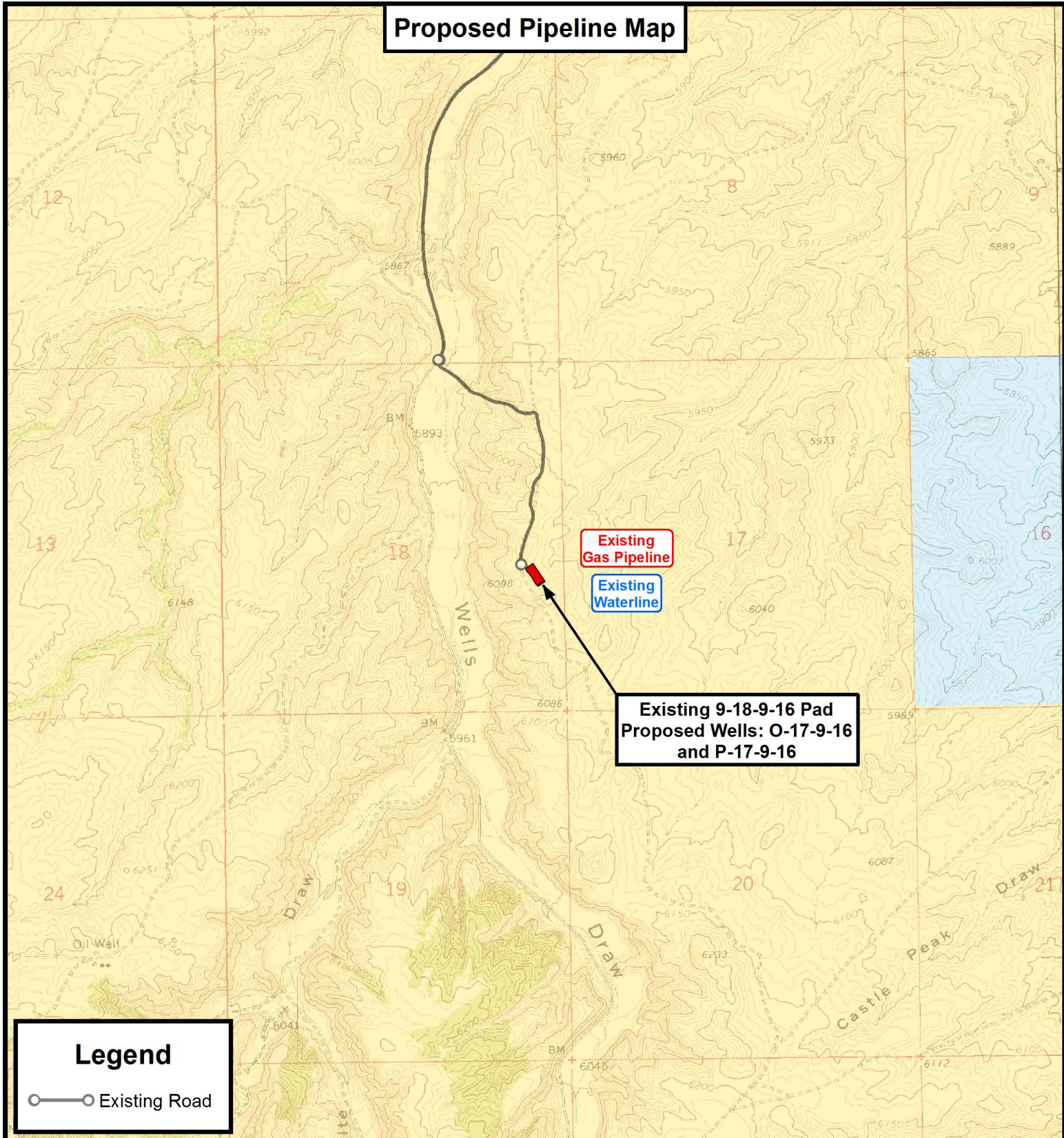
**TOPOGRAPHIC MAP**

SHEET

**B**



# Proposed Pipeline Map



## Legend

Existing Road

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## NEWFIELD EXPLORATION COMPANY

Existing 9-18-9-16 Pad  
Proposed Wells: O-17-9-16 and P-17-9-16  
Sec. 18, T9S, R16E, S.L.B.&M.  
Duchesne County, UT.

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SCALE:	1" = 2,000'		

**TOPOGRAPHIC MAP**

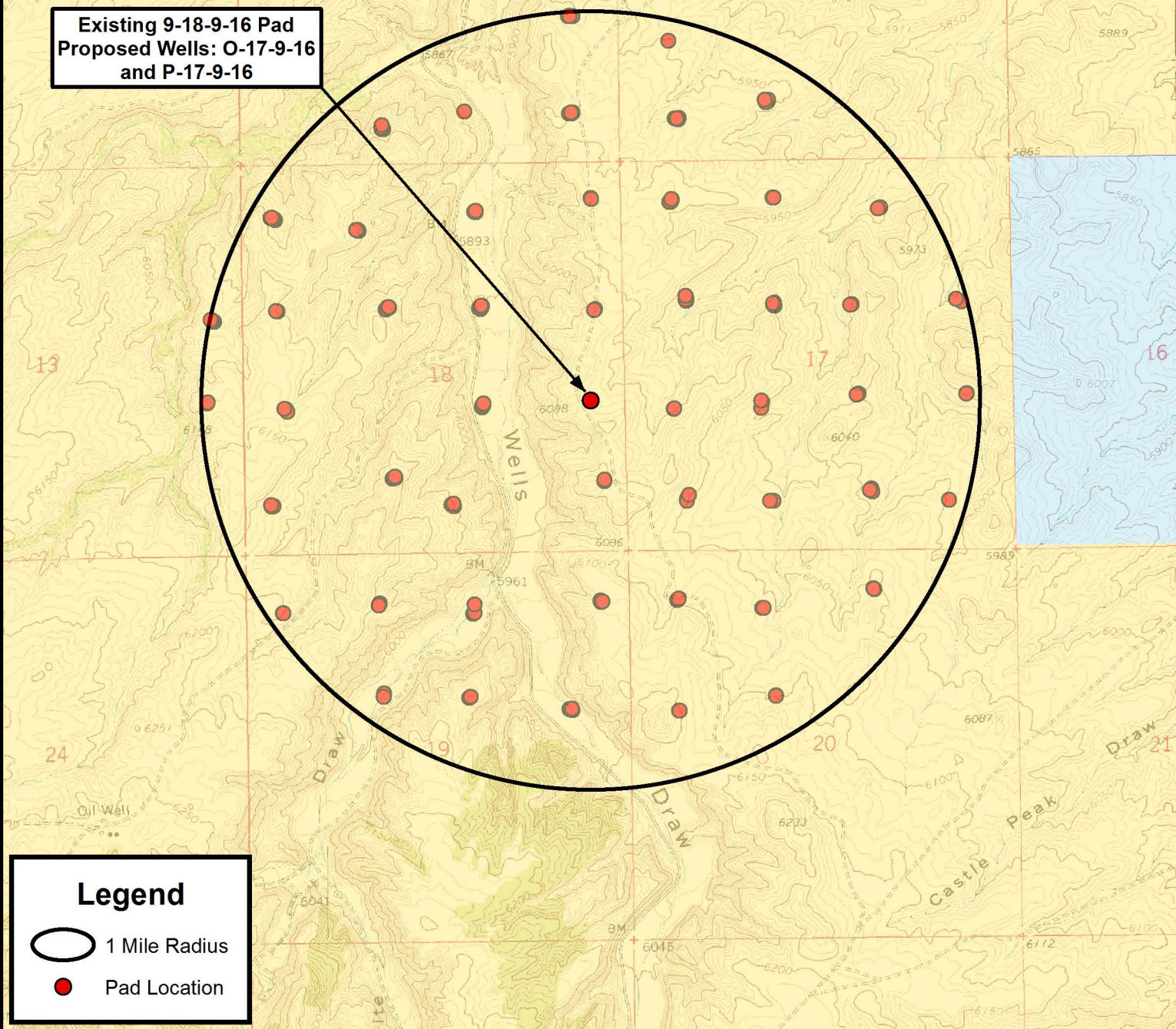
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**C**



**Exhibit "B" Map**

Existing 9-18-9-16 Pad  
Proposed Wells: O-17-9-16  
and P-17-9-16



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SCALE:	1" = 2,000'		

**TOPOGRAPHIC MAP**

SHEET

**D**



## Coordinate Report

Well Number	Feature Type	Latitude (NAD 83) (DMS)	Longitude (NAD 83) (DMS)
9-18-9-16	Surface Hole	40° 01' 45.40" N	110° 09' 15.38" W
O-17-9-16	Surface Hole	40° 01' 45.36" N	110° 09' 15.11" W
P-17-9-16	Surface Hole	40° 01' 45.32" N	110° 09' 14.84" W
O-17-9-16	Center of Pattern	40° 01' 49.71" N	110° 09' 08.61" W
P-17-9-16	Center of Pattern	40° 01' 38.38" N	110° 09' 07.74" W
O-17-9-16	Bottom of Hole	40° 01' 51.03" N	110° 09' 06.64" W
P-17-9-16	Bottom of Hole	40° 01' 36.30" N	110° 09' 05.61" W
Well Number	Feature Type	Latitude (NAD 83) (DD)	Longitude (NAD 83) (DD)
9-18-9-16	Surface Hole	40.029277	110.154272
O-17-9-16	Surface Hole	40.029266	110.154197
P-17-9-16	Surface Hole	40.029254	110.154123
O-17-9-16	Center of Pattern	40.030475	110.152391
P-17-9-16	Center of Pattern	40.027326	110.152149
O-17-9-16	Bottom of Hole	40.030841	110.151845
P-17-9-16	Bottom of Hole	40.026750	110.151559
Well Number	Feature Type	Northing (NAD 83) (UTM Meters)	Longitude (NAD 83) (UTM Meters)
9-18-9-16	Surface Hole	4431349.237	572160.744
O-17-9-16	Surface Hole	4431348.043	572167.094
P-17-9-16	Surface Hole	4431346.850	572173.445
O-17-9-16	Center of Pattern	4431483.688	572319.913
P-17-9-16	Center of Pattern	4431134.466	572343.884
O-17-9-16	Bottom of Hole	4431524.748	572366.173
P-17-9-16	Bottom of Hole	4431070.934	572394.868
Well Number	Feature Type	Latitude (NAD 27) (DMS)	Longitude (NAD 27) (DMS)
9-18-9-16	Surface Hole	40° 01' 45.53" N	110° 09' 12.83" W
O-17-9-16	Surface Hole	40° 01' 45.49" N	110° 09' 12.56" W
P-17-9-16	Surface Hole	40° 01' 45.45" N	110° 09' 12.30" W
O-17-9-16	Center of Pattern	40° 01' 49.84" N	110° 09' 06.06" W
P-17-9-16	Center of Pattern	40° 01' 38.51" N	110° 09' 05.19" W
O-17-9-16	Bottom of Hole	40° 01' 51.16" N	110° 09' 04.09" W
P-17-9-16	Bottom of Hole	40° 01' 36.43" N	110° 09' 03.07" W



**Tri State  
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### NEWFIELD EXPLORATION COMPANY

Existing 9-18-9-16 Pad  
Proposed Wells: O-17-9-16 and P-17-9-16  
Sec. 18, T9S, R16E, S.L.B.&M.  
Duchesne County, UT.

DRAWN BY: A.P.C.  
DATE: 10-15-2013  
VERSION: V1

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**COORDINATE REPORT**

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**1**

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## Coordinate Report

[illegible]

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F: (435) 781-2518

## NEWFIELD EXPLORATION COMPANY

**Existing 9-18-9-16 Pad**  
**Proposed Wells: O-17-9-16 and P-17-9-16**  
**Sec. 18, T9S, R16E, S.L.B.&M.**  
**Duchesne County, UT.**

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DATE:	10-15-2013
VERSION:	V1

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## COORDINATE REPORT

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2

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# **NEWFIELD EXPLORATION**

**USGS Myton SW (UT)**

**SECTION 18 T9, R16**

**O-17-9-16**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**08 October, 2013**





# Payzone Directional Planning Report



<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well O-17-9-16
<b>Company:</b>	NEWFIELD EXPLORATION	<b>TVD Reference:</b>	O-17-9-16 @ 6090.0ft (Original Well Elev)
<b>Project:</b>	USGS Myton SW (UT)	<b>MD Reference:</b>	O-17-9-16 @ 6090.0ft (Original Well Elev)
<b>Site:</b>	SECTION 18 T9, R16	<b>North Reference:</b>	True
<b>Well:</b>	O-17-9-16	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<b>Project</b>	USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Central Zone		

<b>Site</b>	SECTION 18 T9, R16			
<b>Site Position:</b>		<b>Northing:</b>	7,184,524.45 ft	<b>Latitude:</b> 40° 2' 8.610 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,014,084.90 ft	<b>Longitude:</b> 110° 9' 55.350 W
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"	<b>Grid Convergence:</b> 0.85 °

<b>Well</b>	O-17-9-16, SHL LAT: 40 01 45.36 LONG: -110 09 15.11			
<b>Well Position</b>	<b>+N/-S</b>	-2,352.7 ft	<b>Northing:</b>	7,182,219.13 ft
	<b>+E/-W</b>	3,129.7 ft	<b>Easting:</b>	2,017,249.62 ft
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	6,090.0 ft
			<b>Ground Level:</b>	6,080.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	10/8/2013	11.05	65.71	52,016

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	48.09

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,241.0	9.61	48.09	1,238.0	35.8	39.9	1.50	1.50	0.00	48.09	
4,935.9	9.61	48.09	4,881.0	448.1	499.2	0.00	0.00	0.00	0.00	O-17-9-16 TGT
6,152.0	9.61	48.09	6,080.0	583.7	650.3	0.00	0.00	0.00	0.00	



## Payzone Directional

## Planning Report



<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well O-17-9-16
<b>Company:</b>	NEWFIELD EXPLORATION	<b>TVD Reference:</b>	O-17-9-16 @ 6090.0ft (Original Well Elev)
<b>Project:</b>	USGS Myton SW (UT)	<b>MD Reference:</b>	O-17-9-16 @ 6090.0ft (Original Well Elev)
<b>Site:</b>	SECTION 18 T9, R16	<b>North Reference:</b>	True
<b>Well:</b>	O-17-9-16	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	1.50	48.09	700.0	0.9	1.0	1.3	1.50	1.50	0.00
800.0	3.00	48.09	799.9	3.5	3.9	5.2	1.50	1.50	0.00
900.0	4.50	48.09	899.7	7.9	8.8	11.8	1.50	1.50	0.00
1,000.0	6.00	48.09	999.3	14.0	15.6	20.9	1.50	1.50	0.00
1,100.0	7.50	48.09	1,098.6	21.8	24.3	32.7	1.50	1.50	0.00
1,200.0	9.00	48.09	1,197.5	31.4	35.0	47.0	1.50	1.50	0.00
1,241.0	9.61	48.09	1,238.0	35.8	39.9	53.7	1.50	1.50	0.00
1,300.0	9.61	48.09	1,296.2	42.4	47.3	63.5	0.00	0.00	0.00
1,400.0	9.61	48.09	1,394.8	53.6	59.7	80.2	0.00	0.00	0.00
1,500.0	9.61	48.09	1,493.4	64.7	72.1	96.9	0.00	0.00	0.00
1,600.0	9.61	48.09	1,592.0	75.9	84.6	113.6	0.00	0.00	0.00
1,700.0	9.61	48.09	1,690.5	87.1	97.0	130.3	0.00	0.00	0.00
1,800.0	9.61	48.09	1,789.1	98.2	109.4	147.0	0.00	0.00	0.00
1,900.0	9.61	48.09	1,887.7	109.4	121.8	163.7	0.00	0.00	0.00
2,000.0	9.61	48.09	1,986.3	120.5	134.3	180.4	0.00	0.00	0.00
2,100.0	9.61	48.09	2,084.9	131.7	146.7	197.1	0.00	0.00	0.00
2,200.0	9.61	48.09	2,183.5	142.8	159.1	213.8	0.00	0.00	0.00
2,300.0	9.61	48.09	2,282.1	154.0	171.6	230.5	0.00	0.00	0.00
2,400.0	9.61	48.09	2,380.7	165.1	184.0	247.2	0.00	0.00	0.00
2,500.0	9.61	48.09	2,479.3	176.3	196.4	263.9	0.00	0.00	0.00
2,600.0	9.61	48.09	2,577.9	187.5	208.8	280.6	0.00	0.00	0.00
2,700.0	9.61	48.09	2,676.5	198.6	221.3	297.3	0.00	0.00	0.00
2,800.0	9.61	48.09	2,775.1	209.8	233.7	314.0	0.00	0.00	0.00
2,900.0	9.61	48.09	2,873.7	220.9	246.1	330.7	0.00	0.00	0.00
3,000.0	9.61	48.09	2,972.3	232.1	258.6	347.5	0.00	0.00	0.00
3,100.0	9.61	48.09	3,070.9	243.2	271.0	364.2	0.00	0.00	0.00
3,200.0	9.61	48.09	3,169.5	254.4	283.4	380.9	0.00	0.00	0.00
3,300.0	9.61	48.09	3,268.1	265.6	295.9	397.6	0.00	0.00	0.00
3,400.0	9.61	48.09	3,366.7	276.7	308.3	414.3	0.00	0.00	0.00
3,500.0	9.61	48.09	3,465.3	287.9	320.7	431.0	0.00	0.00	0.00
3,600.0	9.61	48.09	3,563.9	299.0	333.1	447.7	0.00	0.00	0.00
3,700.0	9.61	48.09	3,662.5	310.2	345.6	464.4	0.00	0.00	0.00
3,800.0	9.61	48.09	3,761.0	321.3	358.0	481.1	0.00	0.00	0.00
3,900.0	9.61	48.09	3,859.6	332.5	370.4	497.8	0.00	0.00	0.00
4,000.0	9.61	48.09	3,958.2	343.7	382.9	514.5	0.00	0.00	0.00
4,100.0	9.61	48.09	4,056.8	354.8	395.3	531.2	0.00	0.00	0.00
4,200.0	9.61	48.09	4,155.4	366.0	407.7	547.9	0.00	0.00	0.00
4,300.0	9.61	48.09	4,254.0	377.1	420.2	564.6	0.00	0.00	0.00
4,400.0	9.61	48.09	4,352.6	388.3	432.6	581.3	0.00	0.00	0.00
4,500.0	9.61	48.09	4,451.2	399.4	445.0	598.0	0.00	0.00	0.00
4,600.0	9.61	48.09	4,549.8	410.6	457.4	614.7	0.00	0.00	0.00
4,700.0	9.61	48.09	4,648.4	421.8	469.9	631.4	0.00	0.00	0.00
4,800.0	9.61	48.09	4,747.0	432.9	482.3	648.1	0.00	0.00	0.00
4,900.0	9.61	48.09	4,845.6	444.1	494.7	664.8	0.00	0.00	0.00
4,935.9	9.61	48.09	4,881.0	448.1	499.2	670.8	0.00	0.00	0.00
5,000.0	9.61	48.09	4,944.2	455.2	507.2	681.5	0.00	0.00	0.00
5,100.0	9.61	48.09	5,042.8	466.4	519.6	698.2	0.00	0.00	0.00



## Payzone Directional

## Planning Report



<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well O-17-9-16
<b>Company:</b>	NEWFIELD EXPLORATION	<b>TVD Reference:</b>	O-17-9-16 @ 6090.0ft (Original Well Elev)
<b>Project:</b>	USGS Myton SW (UT)	<b>MD Reference:</b>	O-17-9-16 @ 6090.0ft (Original Well Elev)
<b>Site:</b>	SECTION 18 T9, R16	<b>North Reference:</b>	True
<b>Well:</b>	O-17-9-16	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,200.0	9.61	48.09	5,141.4	477.5	532.0	714.9	0.00	0.00	0.00
5,300.0	9.61	48.09	5,240.0	488.7	544.4	731.6	0.00	0.00	0.00
5,400.0	9.61	48.09	5,338.6	499.8	556.9	748.3	0.00	0.00	0.00
5,500.0	9.61	48.09	5,437.2	511.0	569.3	765.0	0.00	0.00	0.00
5,600.0	9.61	48.09	5,535.8	522.2	581.7	781.7	0.00	0.00	0.00
5,700.0	9.61	48.09	5,634.4	533.3	594.2	798.4	0.00	0.00	0.00
5,800.0	9.61	48.09	5,733.0	544.5	606.6	815.1	0.00	0.00	0.00
5,900.0	9.61	48.09	5,831.6	555.6	619.0	831.8	0.00	0.00	0.00
6,000.0	9.61	48.09	5,930.1	566.8	631.5	848.5	0.00	0.00	0.00
6,100.0	9.61	48.09	6,028.7	577.9	643.9	865.2	0.00	0.00	0.00
6,152.0	9.61	48.09	6,080.0	583.7	650.3	873.9	0.00	0.00	0.00

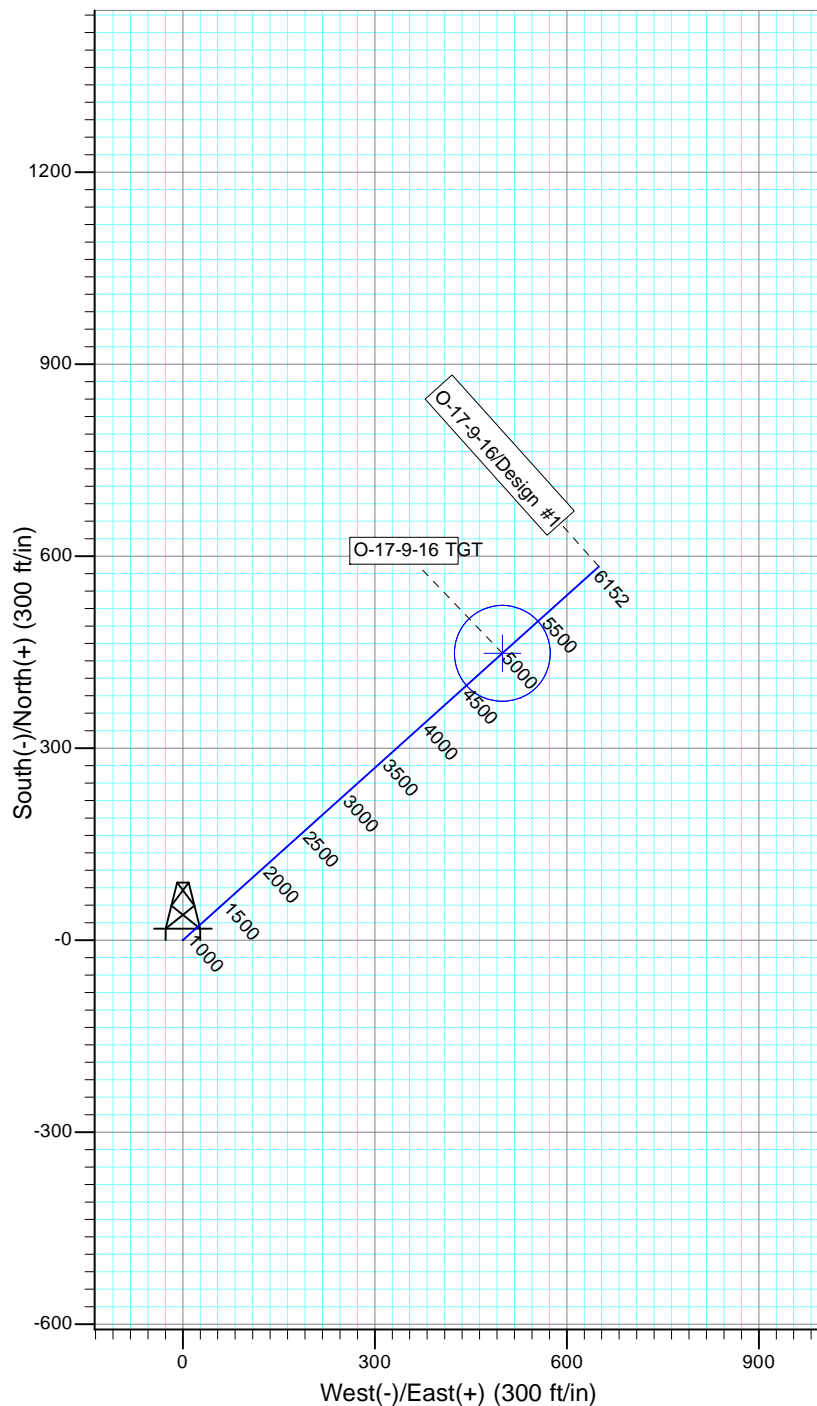
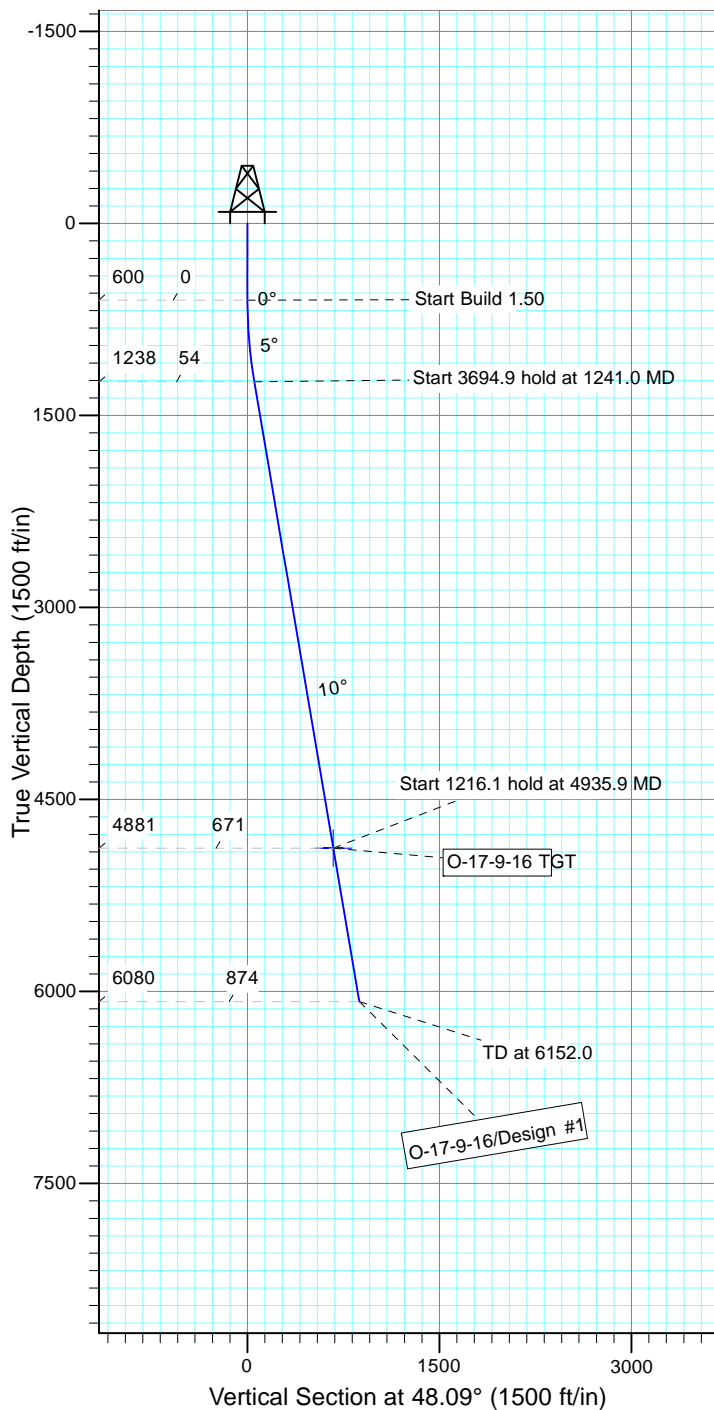


Project: USGS Myton SW (UT)  
 Site: SECTION 18 T9, R16  
 Well: O-17-9-16  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.05°

Magnetic Field  
 Strength: 52015.9snT  
 Dip Angle: 65.71°  
 Date: 10/8/2013  
 Model: IGRF2010



## WELLBORE TARGET DETAILS

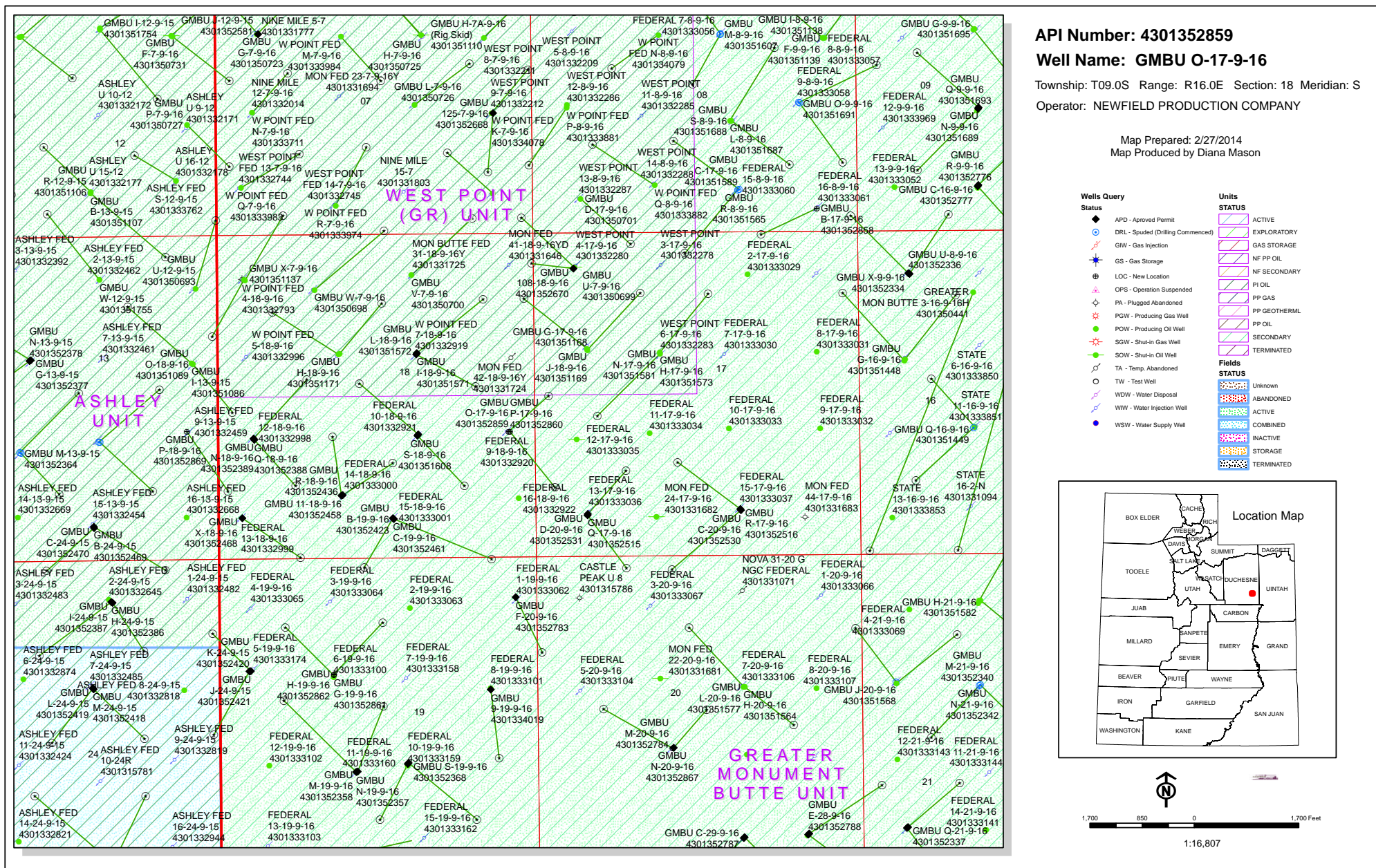
Name	TVD	+N/-S	+E/-W	Shape
O-17-9-16 TGT	4881.0	448.1	499.2	Circle (Radius: 75.0)

## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1241.0	9.61	48.09	1238.0	35.8	39.9	1.50	48.09	53.7	
4	4935.9	9.61	48.09	4881.0	448.1	499.2	0.00	0.00	670.8	O-17-9-16 TGT
5	6152.0	9.61	48.09	6080.0	583.7	650.3	0.00	0.00	873.9	









NEWFIELD



*VIA ELECTRONIC DELIVERY*

February 26, 2014

State of Utah, Division of Oil, Gas and Mining  
ATTN: Diana Mason  
P.O. Box 145801  
Salt Lake City, UT 84114-5801

**Newfield Exploration Company**

1001 17th Street | Suite 2000  
Denver, Colorado 80202  
PH 303-893-0102 | FAX 303-893-0103

RE: Directional Drilling  
**GMBU O-17-9-16**  
Greater Monument Butte (Green River) Unit

Surface Hole: T9S-R16E Section 18: NESE (UTU-64379)  
2051' FSL 440' FEL

At Target: T9S-R16E Section 17: NWSW (UTU-52018)  
2628' FSL 219' FWL

Duchesne County, Utah

Dear Ms. Mason:

Pursuant to the filing by Newfield Production Company (NPC) of an Application for Permit to Drill the above referenced well dated 2/24/14, a copy of which is attached, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole and target locations of this well are both within the boundaries of the Greater Monument Butte Unit (UTU-87538X), of which Newfield certifies that it is the operator. Further, Newfield certifies that all lands within 460 feet of the entire directional well bore are within the Greater Monument Butte Unit.

NPC is permitting this well as a directional well in order to mitigate surface disturbance by utilizing pre-existing roads and pipelines.

NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please contact the undersigned at 303-323-9770 or by email at [ldein@newfield.com](mailto:ldein@newfield.com). Your consideration in this matter is greatly appreciated.

Sincerely,  
Newfield Production Company

Levi Dein  
Landman

Form 3160-3  
(August 2007)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No. 1004-0136  
Expires July 31, 2010

## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU64379
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator NEWFIELD EXPLORATION Contact: HEATHER CALDER E-Mail: hcalder@newfield.com		7. If Unit or CA Agreement, Name and No. GMBU
3a. Address ROUTE 3 BOX 3630 MYTON, UT 84052		8. Lease Name and Well No. GMBU O-17-9-16
3b. Phone No. (include area code) Ph: 435-646-4936 Fx: 435-646-4936		9. API Well No.
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NESE 2051FSL 440FEL At proposed prod. zone NWSW 2628FSL 219FWL		10. Field and Pool, or Exploratory MONUMENT BUTTE
14. Distance in miles and direction from nearest town or post office* 13.6 MILES SOUTH OF MYTON, UT		11. Sec., T., R., M., or Blk. and Survey or Area Sec 18 T9S R16E Mer SLB
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 219'	16. No. of Acres in Lease 1626.40	12. County or Parish DUCHESNE
17. Spacing Unit dedicated to this well 20.00	18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 1455'	13. State UT
19. Proposed Depth 6152 MD 6080 TVD	20. BLM/BIA Bond No. on file WYB000493	
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6080 GL	22. Approximate date work will start 04/01/2014	23. Estimated duration 7 DAYS

## 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- |                                                                                                                                                 |                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 1. Well plat certified by a registered surveyor.                                                                                                | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.                                                                                                                             | 5. Operator certification                                                                          |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature (Electronic Submission)	Name (Printed/Typed) HEATHER CALDER Ph: 435-646-4936	Date 02/24/2014
Title PRODUCTION TECHNICIAN		
Approved by (Signature)	Name (Printed/Typed)	Date
Title	Office	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

## Additional Operator Remarks (see next page)

Electronic Submission #236473 verified by the BLM Well Information System  
For NEWFIELD EXPLORATION, sent to the Vernal

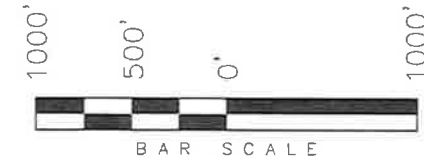
\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

API Well Number: 43013528590000

**Additional Operator Remarks:**

SURFACE HOLE LEASE:UTU-64379  
BOTTOM HOLE LEASE:UTU-52018

*NEWFIELD EXPLORATION COMPANY*



1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.



THIS IS TO CERTIFY THAT THE ABOVE PLAN WAS  
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS  
MADE BY ME OR UNDER MY SUPERVISION AND THAT  
THE SAME ARE TRUE AND CORRECT TO THE BEST  
OF MY KNOWLEDGE AND BELIEF.

10-10-13  
STACY W.

REGISTERED LAND SURVEYOR  
REGISTRATION No. 6637  
STATE OF UTAH

**TRI STATE LAND SURVEYING & CONSULTING**

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078

(435) 781-2501

DATE SURVEYED:

09-26-12

SURVEYED BY: W.H.

DATE DRAWN:

DRAWN BY: L.K.

REVISÉ:

SCALE: 1" = 1000'

VERSION:

V1

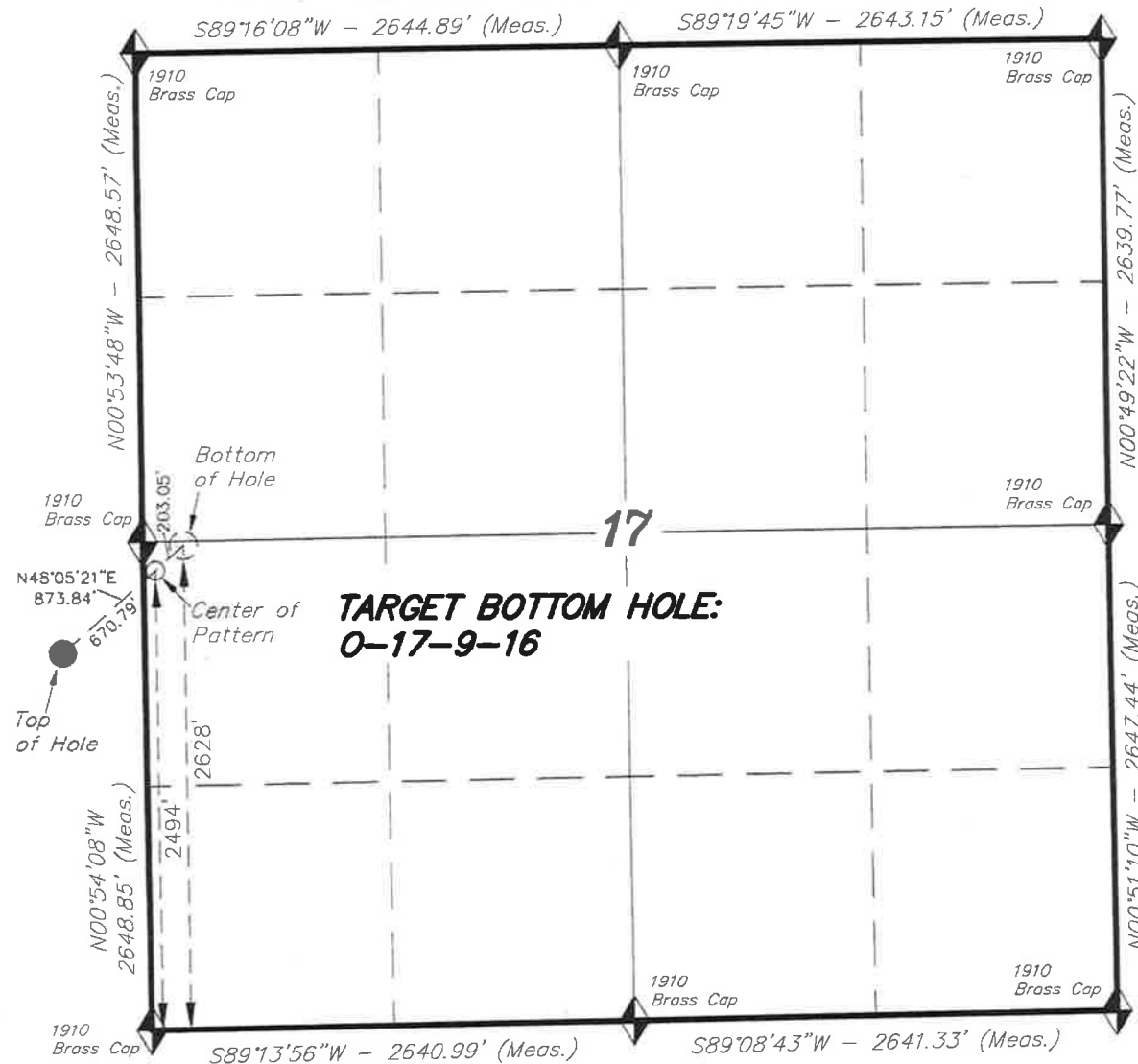


= SECTION CORNERS LOCATED

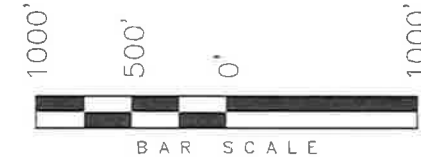
BASIS OF ELEV: Elevations are based on  
an N.G.S. OPUS Correction. LOCATION:  
LAT. 40°04'09.56" LONG. 110°00'43.28"  
(Tristate Aluminum Cap) Elev. 5281.57'

<b>NAD 83 (SURFACE LOCATION)</b>
LATITUDE = 40°01'45.36"
LONGITUDE = 110°09'15.11"
<b>NAD 27 (SURFACE LOCATION)</b>
LATITUDE = 40°01'45.49"
LONGITUDE = 110°09'12.56"



**T9S, R16E, S.L.B.&M.****NEWFIELD EXPLORATION COMPANY**

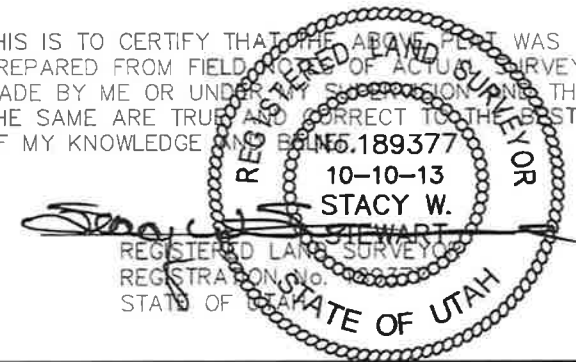
TARGET BOTTOM HOLE, 0-17-9-16,  
LOCATED AS SHOWN IN THE NW 1/4  
SW 1/4 OF SECTION 17, T9S, R16E,  
S.L.B.&M. DUCHESNE COUNTY, UTAH.

**NOTES:**

1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.
3. The Center of Pattern footages are 2494' FSL & 66' FWL.
4. The Bottom of Hole footages are 2628' FSL & 219' FWL.



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS  
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS  
MADE BY ME OR UNDER MY SUPERVISION AND THAT  
THE SAME ARE TRUE AND CORRECT TO THE BEST  
OF MY KNOWLEDGE AND BELIEF.



◆ = SECTION CORNERS LOCATED

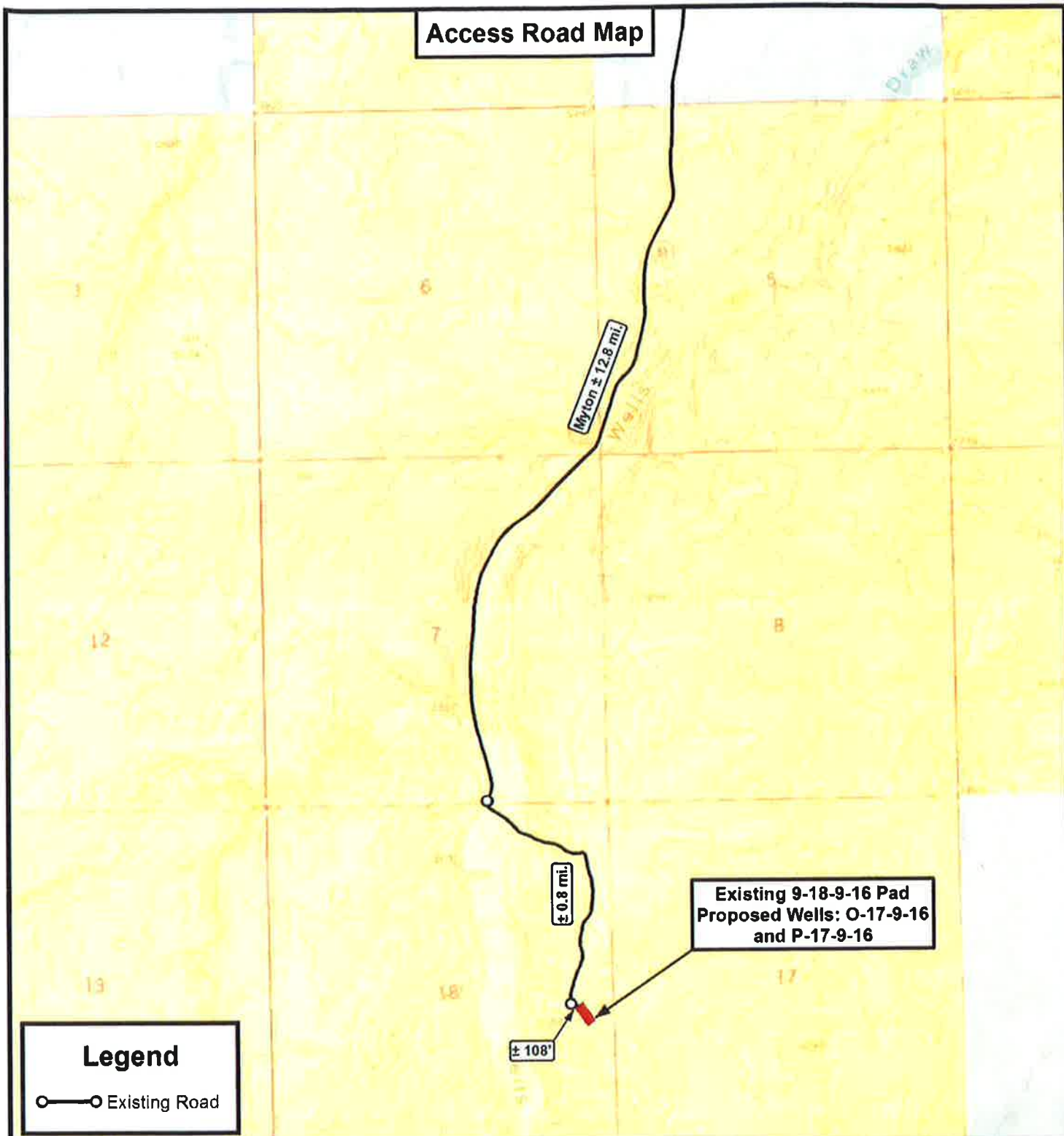
BASIS OF ELEV; Elevations are based on  
an N.G.S. OPUS Correction. LOCATION:  
LAT.  $40^{\circ}04'09.56''$  LONG.  $110^{\circ}00'43.28''$   
(Tristate Aluminum Cap) Elev. 5281.57'

NAD 83 (CENTER OF PATTERN)	NAD 83 (BOTTOM HOLE LOCATION)
LATITUDE = $40^{\circ}01'49.71''$	LATITUDE = $40^{\circ}01'51.03''$
LONGITUDE = $110^{\circ}09'08.61''$	LONGITUDE = $110^{\circ}09'06.64''$
NAD 27 (CENTER OF PATTERN)	NAD 27 (BOTTOM HOLE LOCATION)
LATITUDE = $40^{\circ}01'49.84''$	LATITUDE = $40^{\circ}01'51.16''$
LONGITUDE = $110^{\circ}09'06.06''$	LONGITUDE = $110^{\circ}09'04.09''$

**TRI STATE LAND SURVEYING & CONSULTING**

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
(435) 781-2501

DATE SURVEYED: 09-26-12	SURVEYED BY: W.H.	VERSION:
DATE DRAWN: 10-10-13	DRAWN BY: L.K.	V1
REVISED:	SCALE: 1" = 1000'	



THE PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY TRI-STATE LAND SURVEYING, INC. - TRI-STATE DOES NOT WARRANTY PROPERTY PARCEL DATA OR ANY ASSOCIATED INFORMATION. A PROPERTY SURVEY IS REQUIRED TO DETERMINE THE ACTUAL LOCATION OF PROPERTY LINES AND SHOW ACCURATE DISTANCES ACROSS PARCELS.



**Tri State  
Land Surveying, Inc.**

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501  
F: (435) 781-2518

N



### NEWFIELD EXPLORATION COMPANY

Existing 9-18-9-16 Pad  
Proposed Wells: O-17-9-16 and P-17-9-16  
Sec. 18, T9S, R16E, S.L.B.&M.  
Duchesne County, UT.

DRAWN BY:	A.P.C.	REVISED:	VERSION:
DATE:	10-15-2013		V1
SCALE:	1" = 2,000'		

**TOPOGRAPHIC MAP**

SHEET

**B**

# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
440 West 200 South, Suite 500  
Salt Lake City, UT 84101

IN REPLY REFER TO:  
3160  
(UT-922)

March 3, 2014

### Memorandum

To: Assistant Field Office Manager Minerals,  
Vernal Field Office

From: Michael Coulthard, Petroleum Engineer

Subject: 2014 Plan of Development Greater Monument  
Butte Unit, Duchesne and Uintah Counties,  
Utah.

Pursuant to email between Diana Mason, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2014 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ GREEN RIVER)		
43-013-52856	GMBU K-23-9-15	Sec 24 T09S R15E 1960 FNL 0683 FWL
		BHL Sec 23 T09S R15E 2470 FSL 0317 FEL
43-013-52857	GMBU N-24-9-15	Sec 24 T09S R15E 1949 FNL 0701 FWL
		BHL Sec 24 T09S R15E 2424 FSL 1654 FWL
43-013-52858	GMBU B-17-9-16	Sec 08 T09S R16E 0393 FSL 0647 FEL
		BHL Sec 17 T09S R16E 0032 FNL 1557 FEL
43-013-52859	GMBU O-17-9-16	Sec 18 T09S R16E 2051 FSL 0440 FEL
		BHL Sec 17 T09S R16E 2628 FSL 0219 FWL
43-013-52860	GMBU P-17-9-16	Sec 18 T09S R16E 2047 FSL 0419 FEL
		BHL Sec 17 T09S R16E 1137 FSL 0298 FWL
43-013-52861	GMBU G-19-9-16	Sec 19 T09S R16E 1911 FNL 1854 FWL
		BHL Sec 19 T09S R16E 1117 FNL 1069 FWL

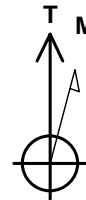
API #	WELL NAME	LOCATION
(Proposed PZ GREEN RIVER)		
43-013-52865	GMBU I-22-9-16	Sec 22 T09S R16E 2013 FNL 1823 FEL
	BHL	Sec 22 T09S R16E 1005 FNL 1175 FEL
43-013-52866	GMBU L-22-9-16	Sec 22 T09S R16E 1996 FNL 1810 FEL
	BHL	Sec 22 T09S R16E 2430 FSL 1144 FEL
43-013-52867	GMBU N-20-9-16	Sec 20 T09S R16E 2149 FSL 2167 FWL
	BHL	Sec 20 T09S R16E 2485 FNL 1051 FWL
43-013-52868	GMBU G-13-9-16	Sec 13 T09S R16E 1974 FNL 0835 FWL
	BHL	Sec 13 T09S R16E 1059 FNL 1452 FWL
43-013-52869	GMBU P-18-9-16	Sec 13 T09S R15E 2088 FSL 0506 FEL
	BHL	Sec 18 T09S R16E 1111 FSL 0157 FWL
43-047-54305	GMBU J-25-8-17	Sec 30 T08S R18E 0522 FNL 0652 FWL
	BHL	Sec 25 T08S R17E 1550 FNL 0123 FEL
43-047-54306	GMBU G-30-8-18	Sec 30 T08S R18E 0502 FNL 0658 FWL
	BHL	Sec 30 T08S R18E 1520 FNL 1479 FWL

This office has no objection to permitting the wells at this time.

API Well Number: 43013528590000

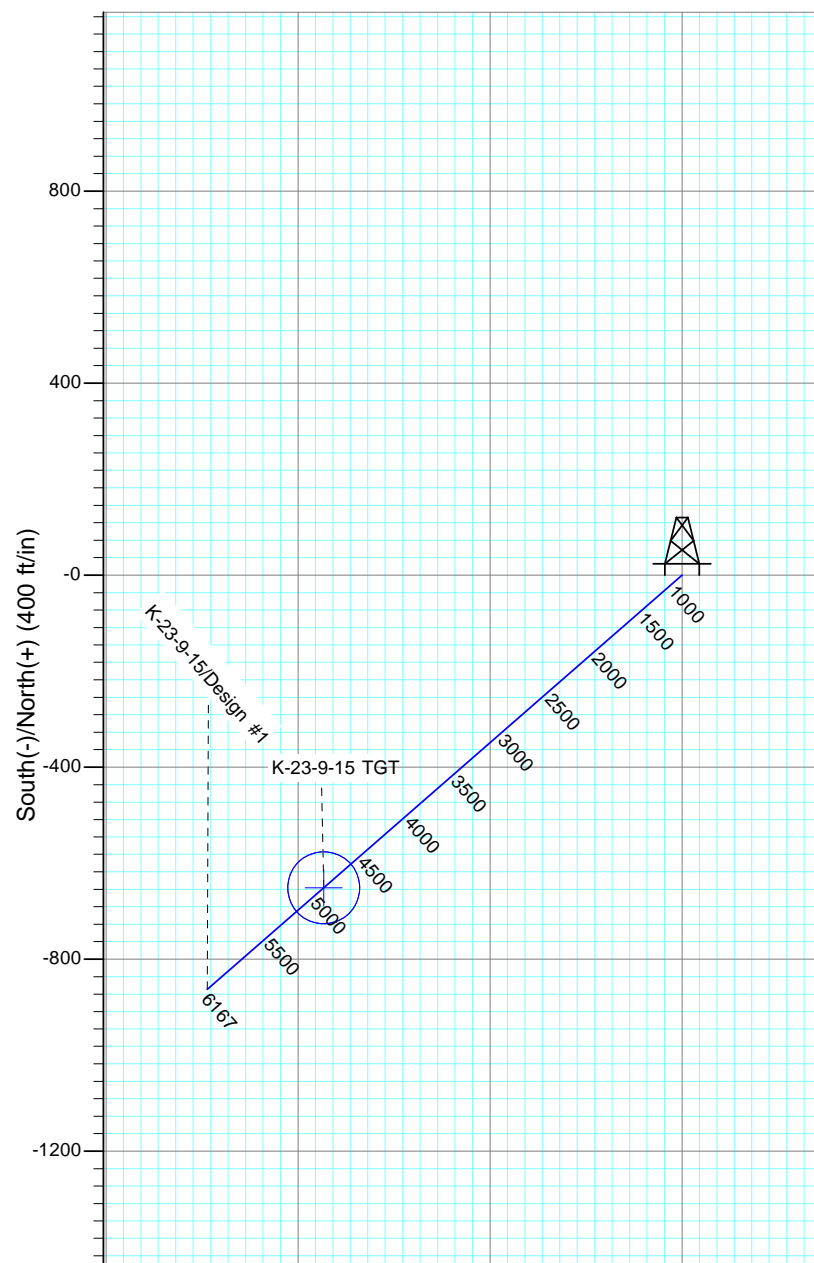
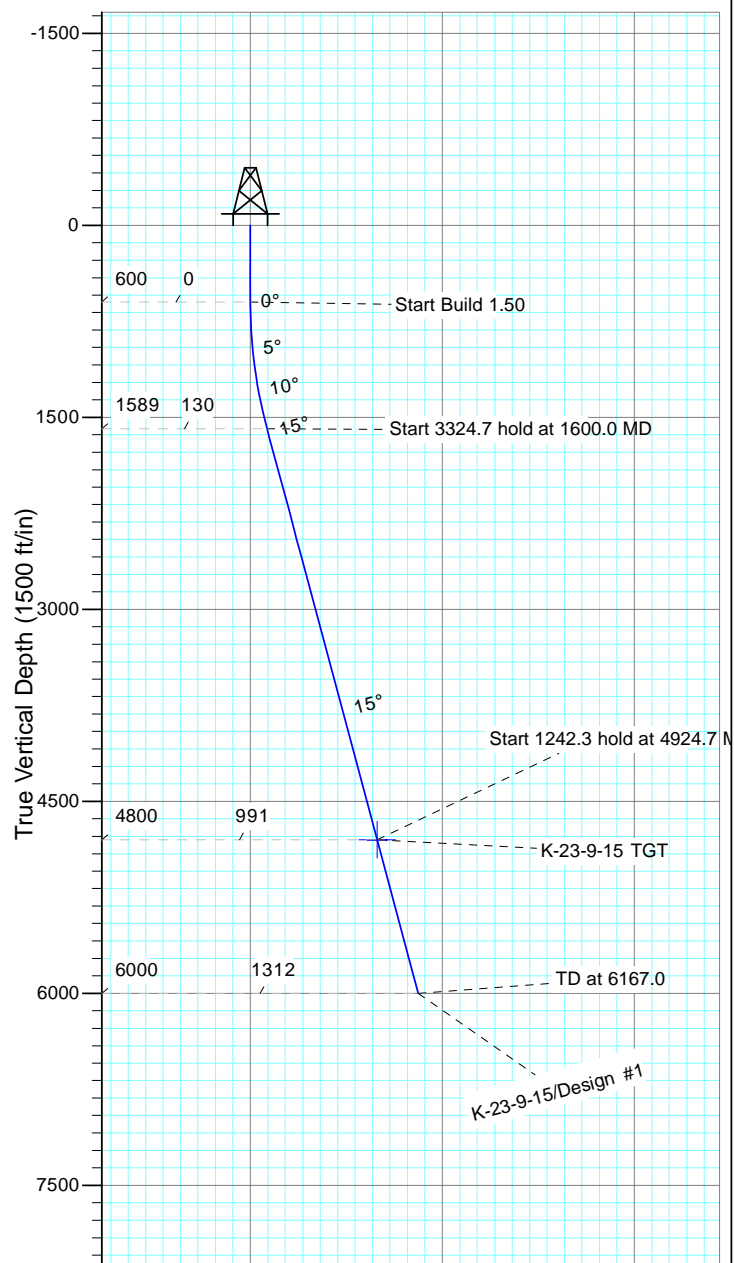


Project: USGS Myton SW (UT)  
Site: SECTION 24 T9S, R15E  
Well: K-23-9-15  
Wellbore: Wellbore #1  
Design: Design #1



Azimuths to True North  
Magnetic North: 11.06°

Magnetic Field  
Strength: 52000.4snT  
Dip Angle: 65.69°  
Date: 10/21/2013  
Model: IGRF2010

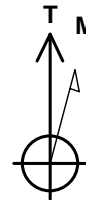




API Well Number: 43013528590000

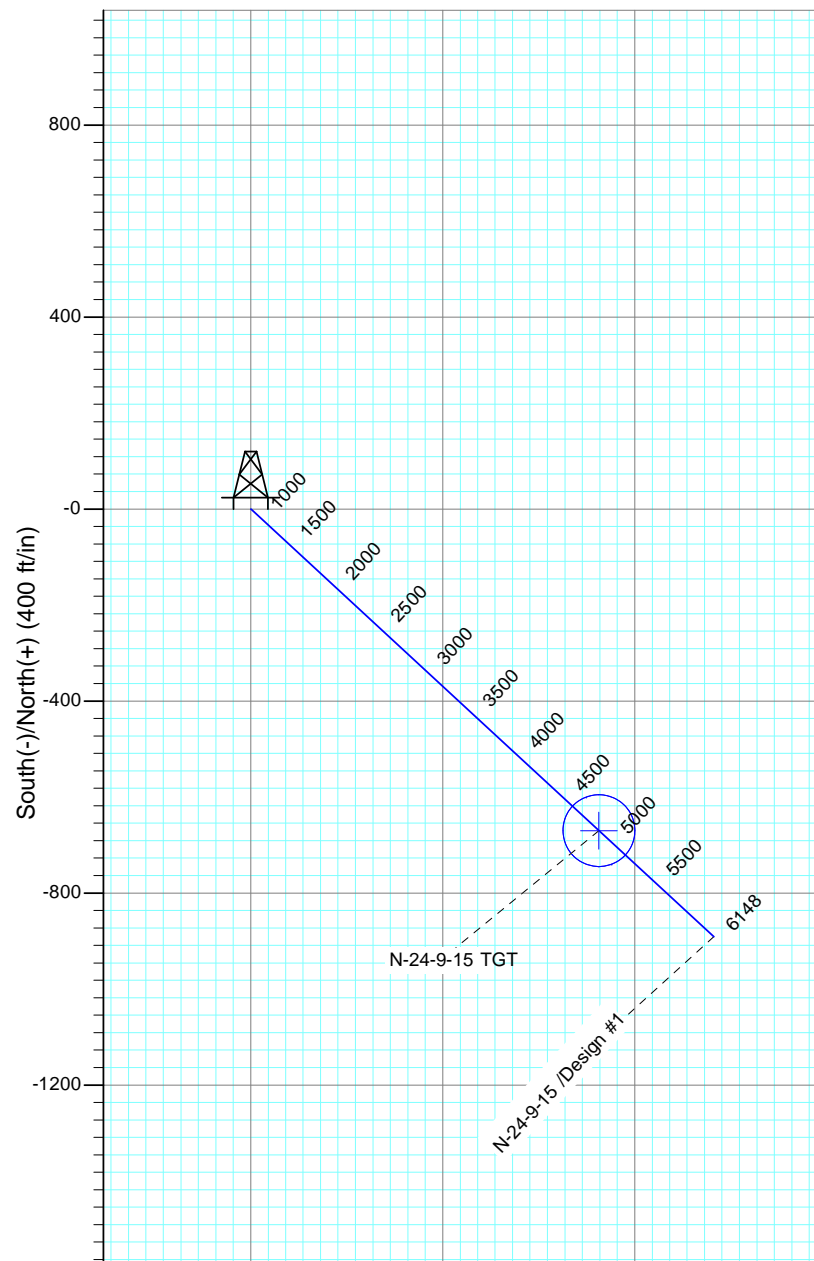
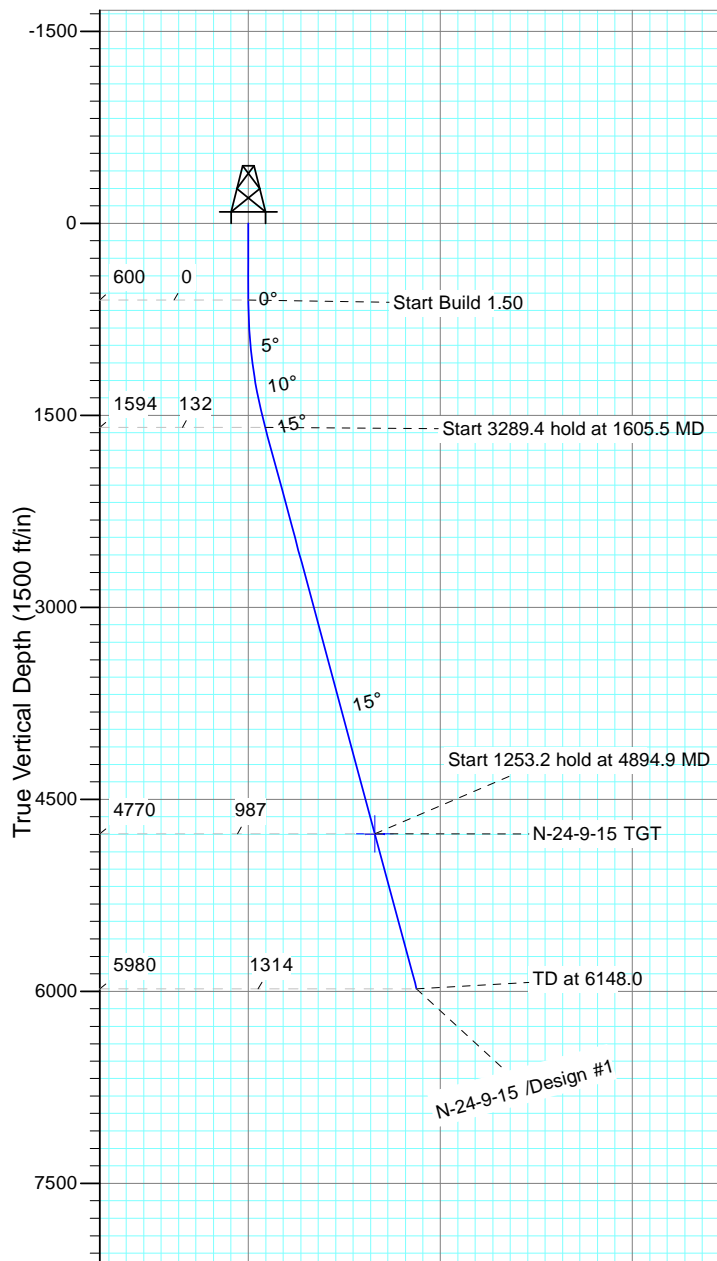


Project: USGS Myton SW (UT)  
Site: SECTION 24 T9S, R15E  
Well: N-24-9-15  
Wellbore: Wellbore #1  
Design: Design #1



Azimuths to True North  
Magnetic North: 11.06°

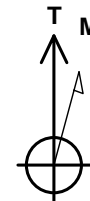
Magnetic Field  
Strength: 52000.4snT  
Dip Angle: 65.69°  
Date: 10/21/2013  
Model: IGRF2010



API Well Number: 43013528590000



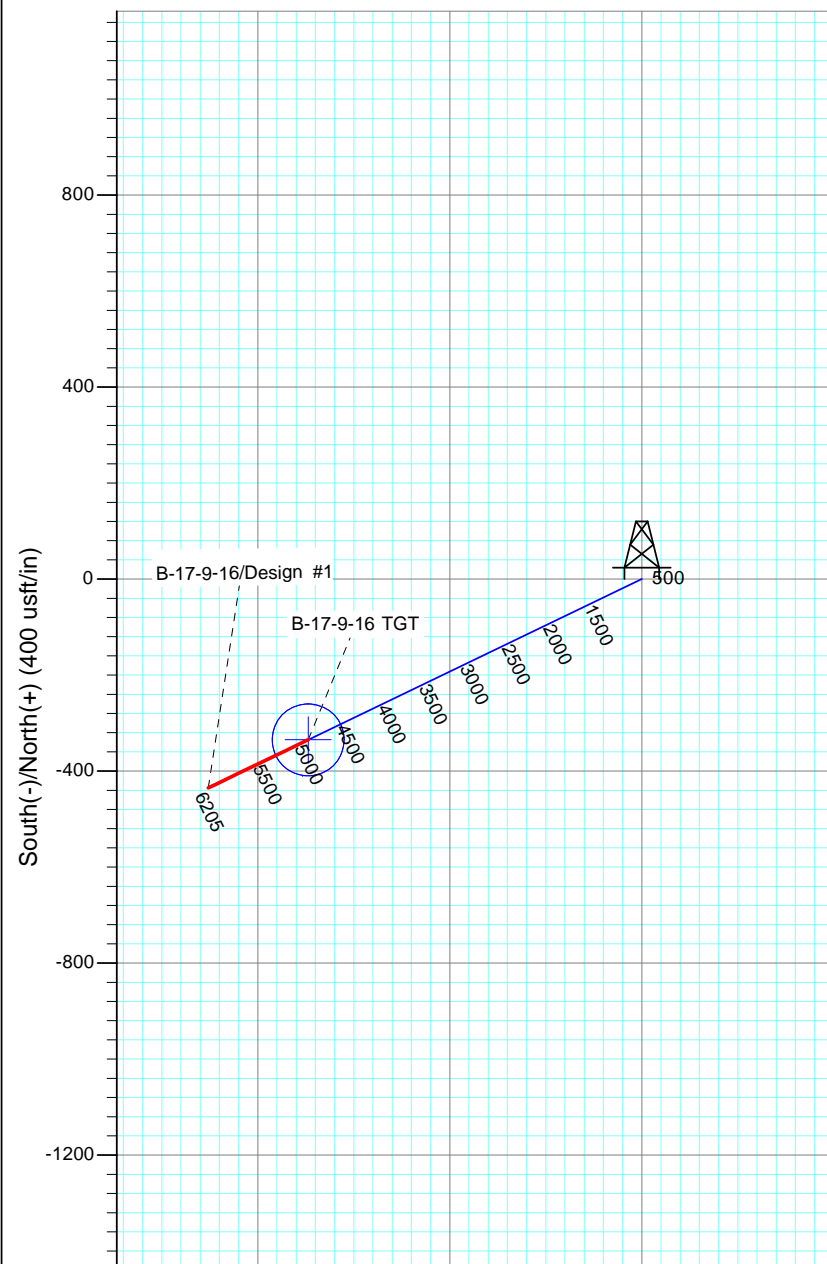
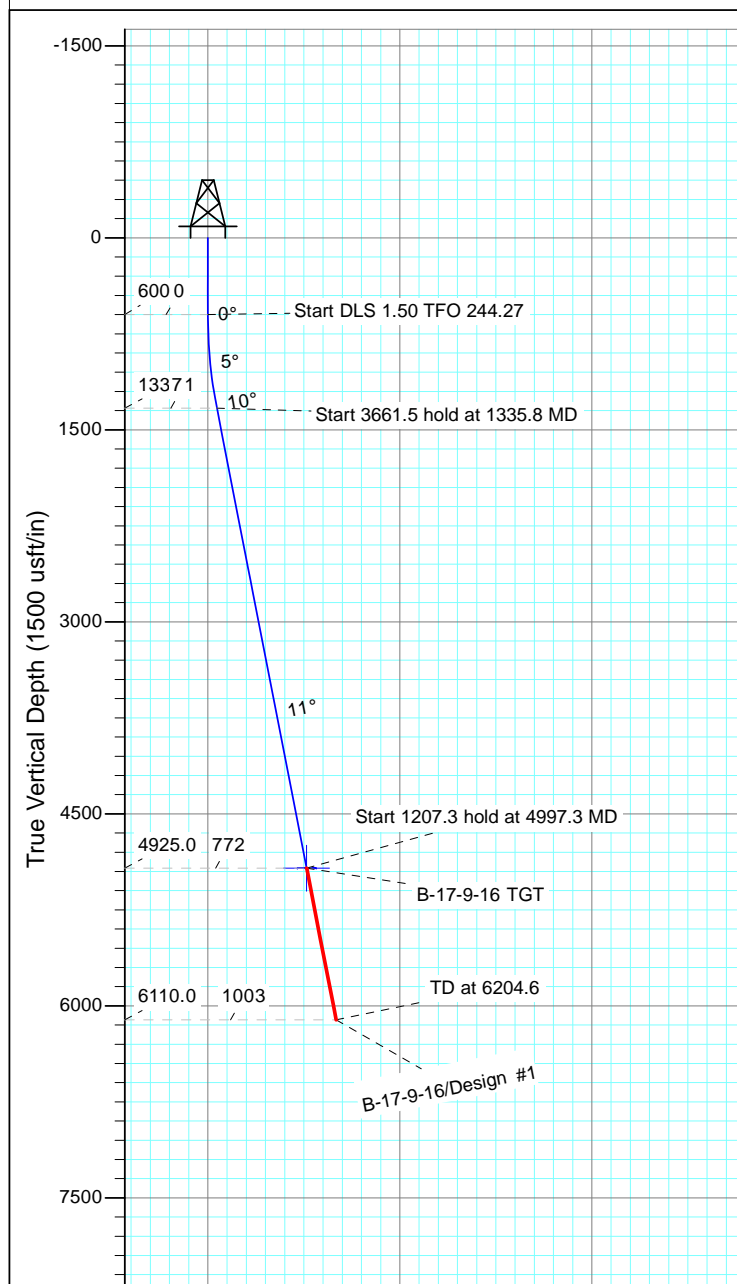
Project: USGS Myton SW (UT)  
Site: SECTION 8 T9S, R16E  
Well: B-17-9-16  
Wellbore: Wellbore #1  
Design: Design #1



Azimuths to True North  
Magnetic North: 11.00°

Magnetic Field  
Strength: 51991.2snT  
Dip Angle: 65.71°  
Date: 2/12/2014  
Model: IGRF2010

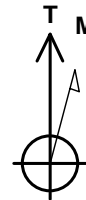
KOP @ 600'  
DOGLEG RATE 1.5 DEG/100  
TARGET RADIUS IS 75'



API Well Number: 43013528590000

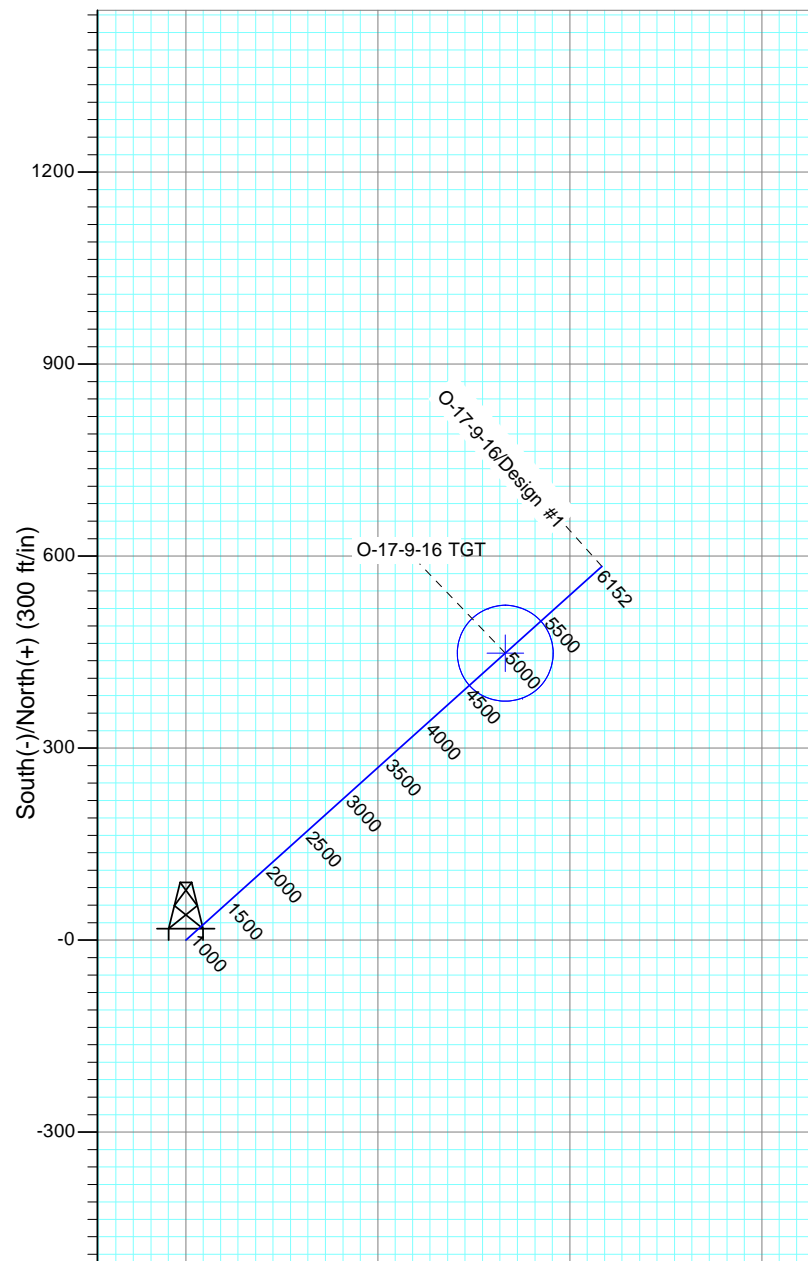
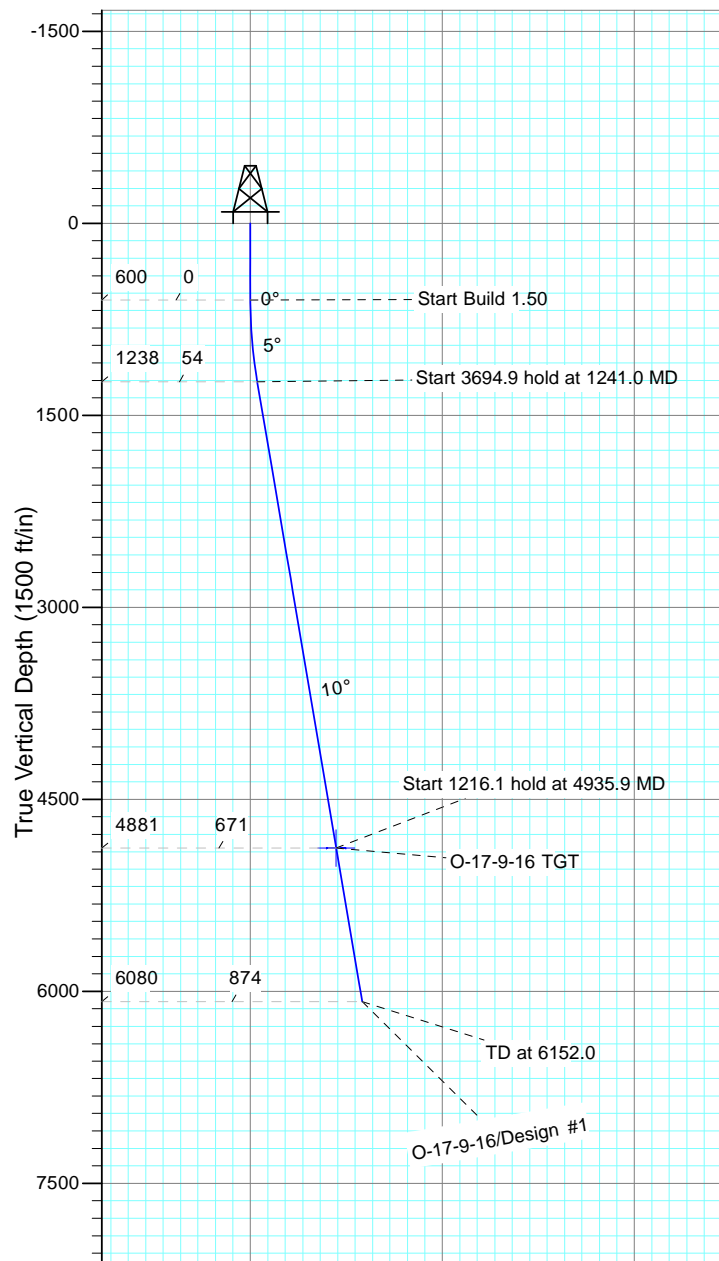


Project: USGS Myton SW (UT)  
Site: SECTION 18 T9, R16  
Well: O-17-9-16  
Wellbore: Wellbore #1  
Desian: Desian #1



Azimuths to True North  
Magnetic North: 11.05°

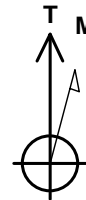
Magnetic Field  
Strength: 52015.9snT  
Dip Angle: 65.71°  
Date: 10/8/2013  
Model: IGRF2010



API Well Number: 43013528590000

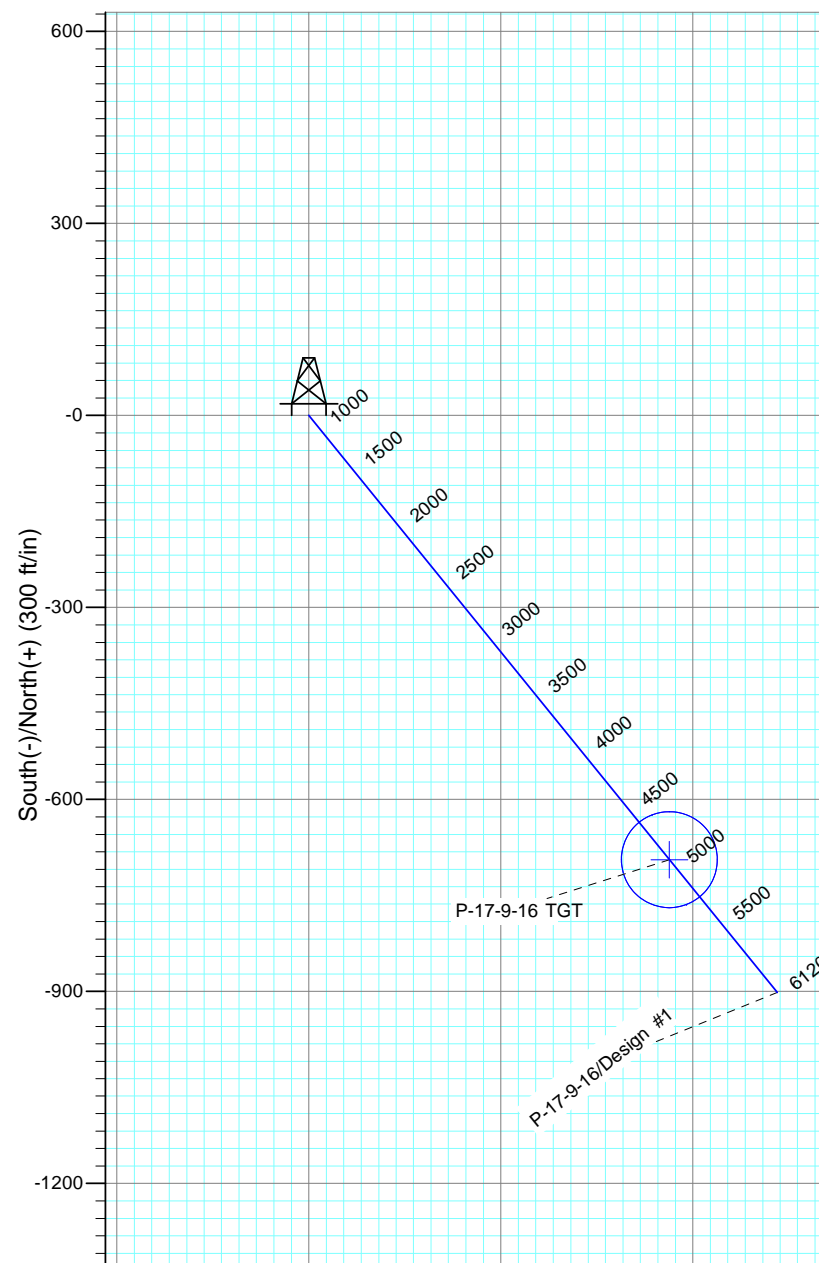
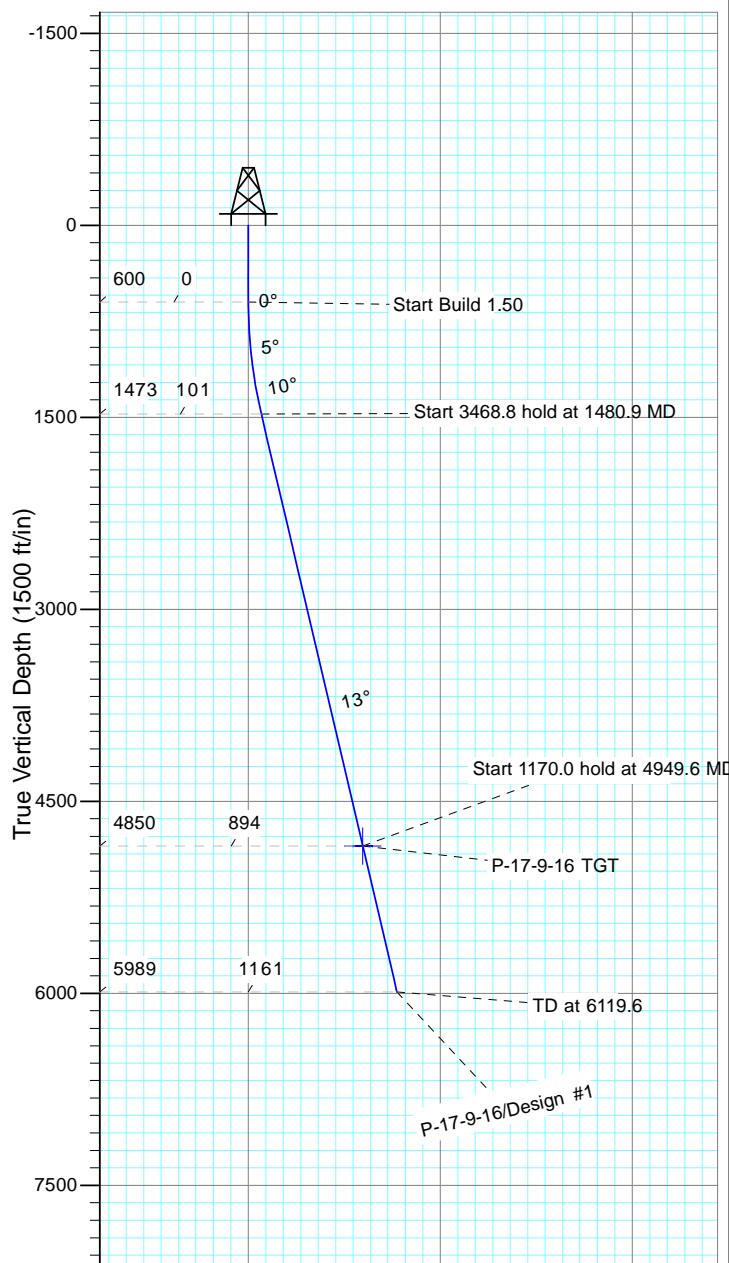


Project: USGS Myton SW (UT)  
Site: SECTION 18 T9, R16  
Well: P-17-9-16  
Wellbore: Wellbore #1  
Design: Design #1



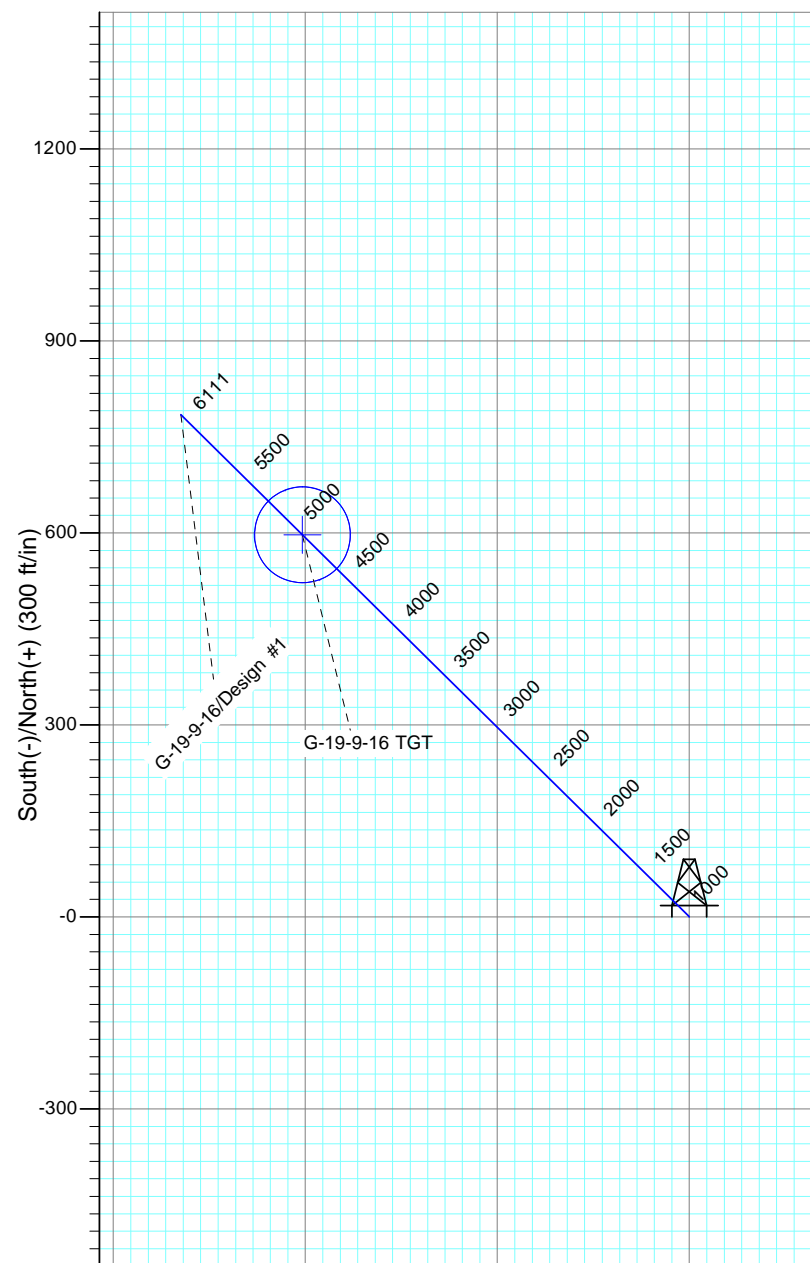
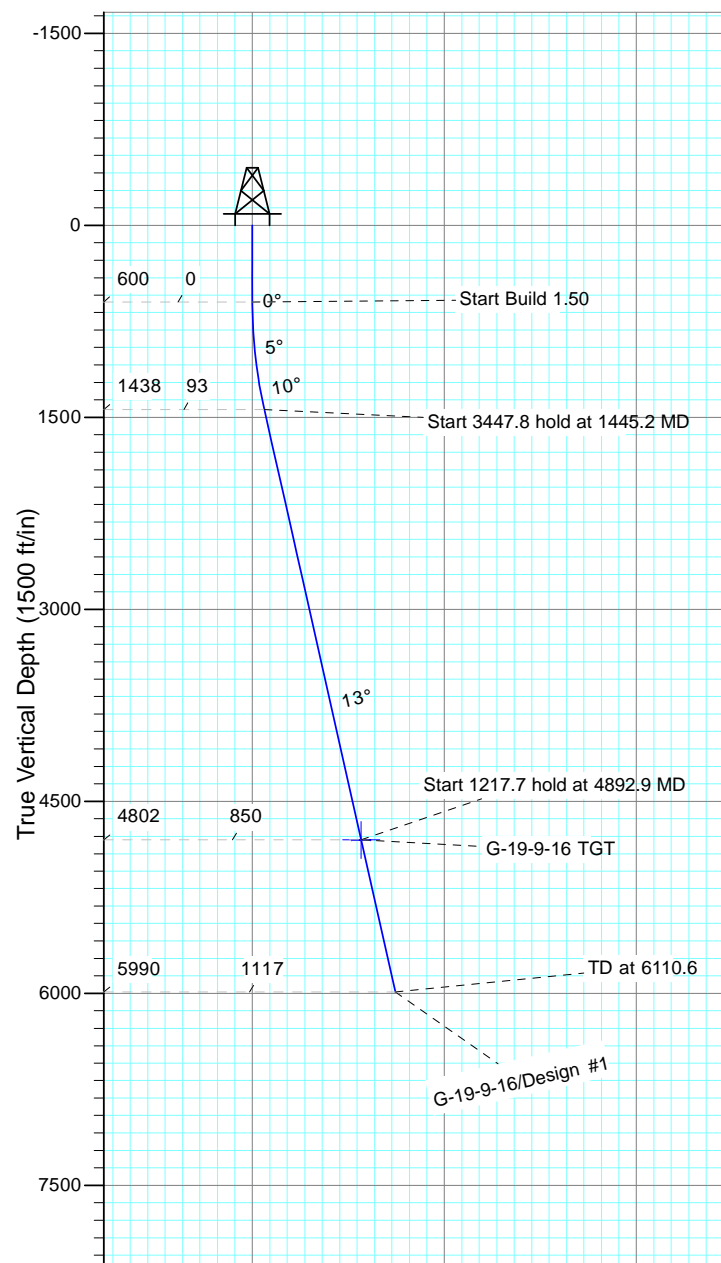
Azimuths to True North  
Magnetic North: 11.05°

Magnetic Field  
Strength: 52015.9snT  
Dip Angle: 65.71°  
Date: 10/8/2013  
Model: IGRF2010





Magnetic Field  
Strength: 52011.5nT  
Dip Angle: 65.70°  
Date: 9/30/2013  
Model: IGRF2010



API Well Number: 43013528590000

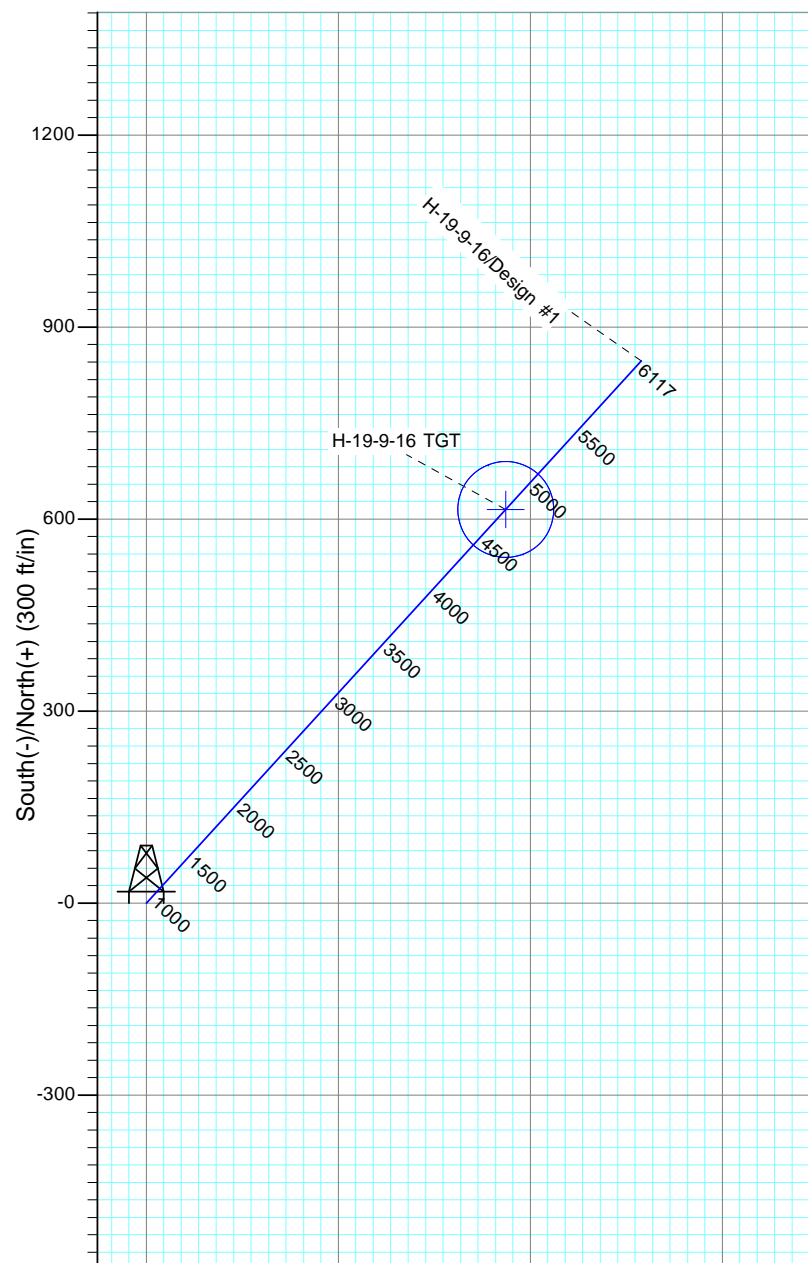
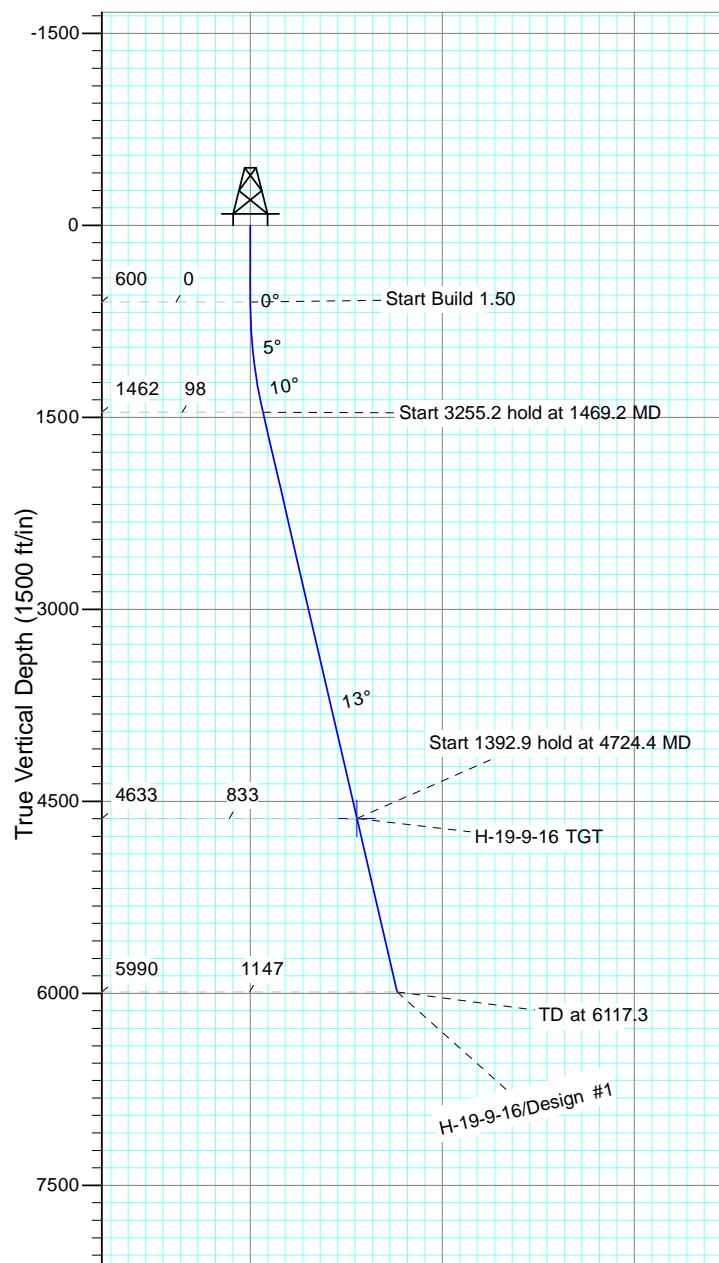


Project: USGS Myton SW (UT)  
Site: SECTION 19 T9S, R16E  
Well: H-19-9-16  
Wellbore: Wellbore #1  
Design: Design #1



Azimuths to True North  
Magnetic North: 11.06°

Magnetic Field  
Strength: 52011.5snT  
Dip Angle: 65.70°  
Date: 9/30/2013  
Model: IGRF2010





API Well Number: 43013528590000

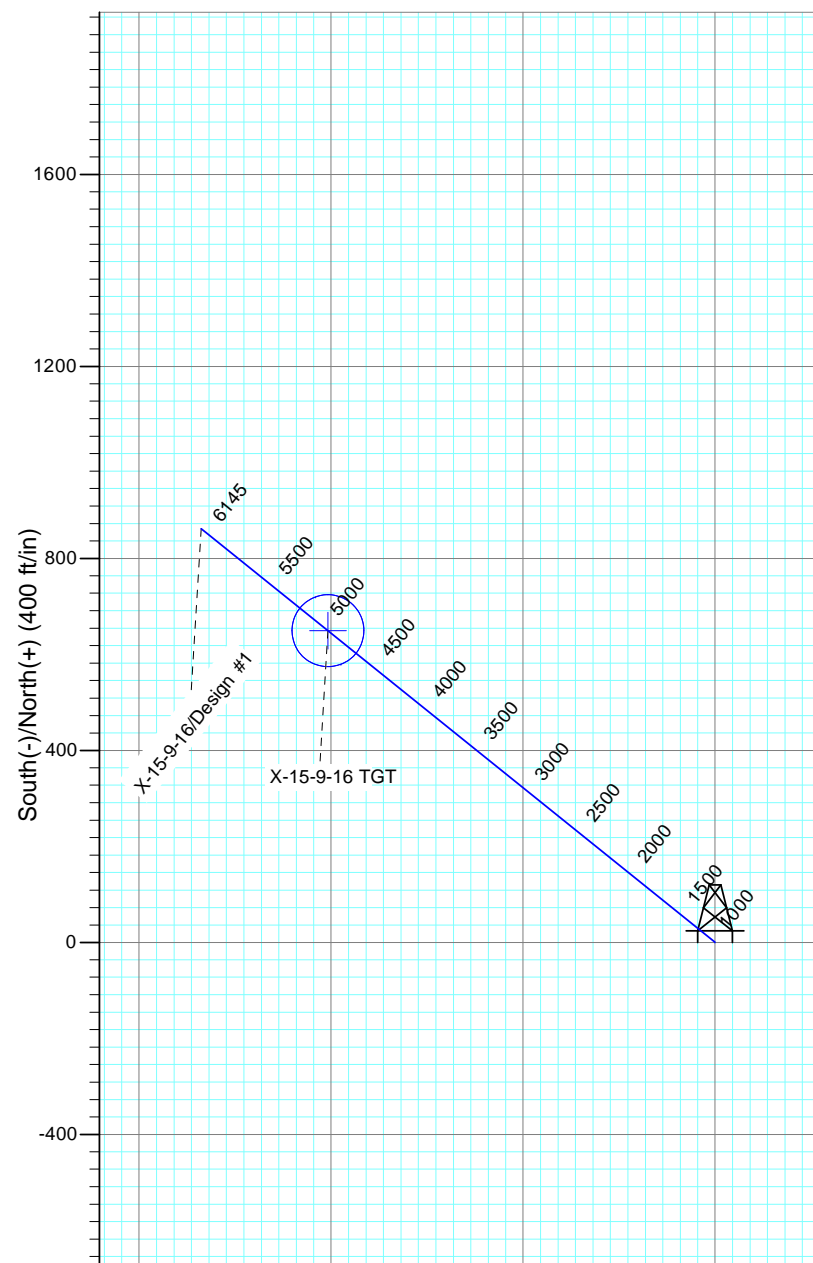
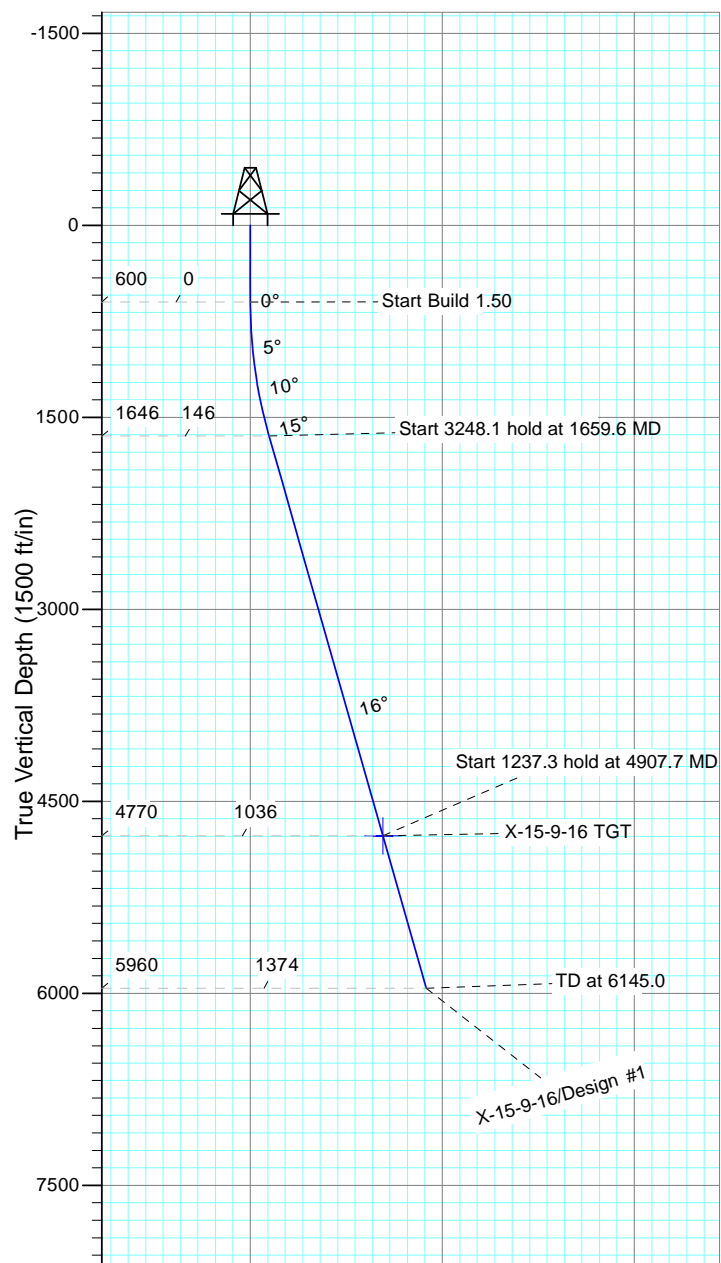


Project: USGS Myton SW (UT)  
Site: SECTION 15 T9S, R16E  
Well: X-15-9-16  
Wellbore: Wellbore #1  
Design: Design #1



Azimuths to True North  
Magnetic North: 11.03°

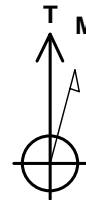
Magnetic Field  
Strength: 52019.8snT  
Dip Angle: 65.71°  
Date: 10/9/2013  
Model: IGRF2010



API Well Number: 43013528590000

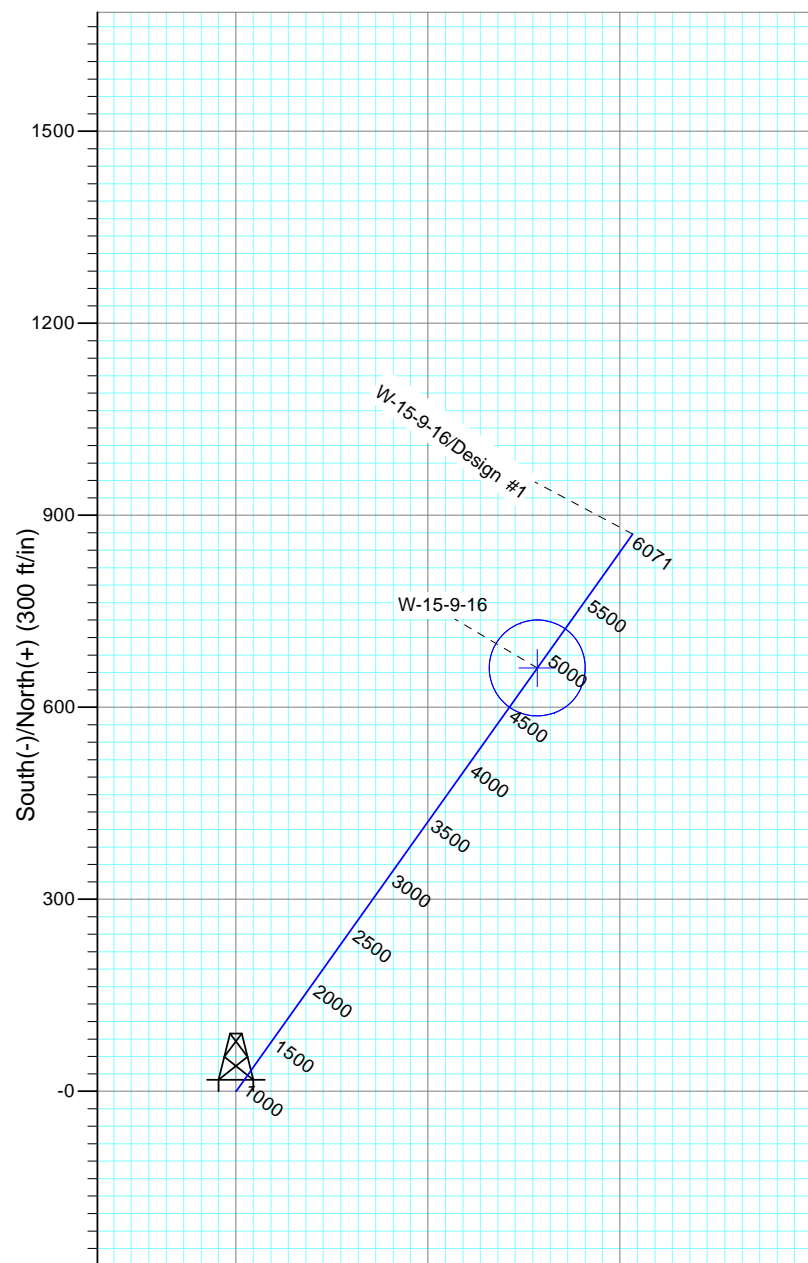
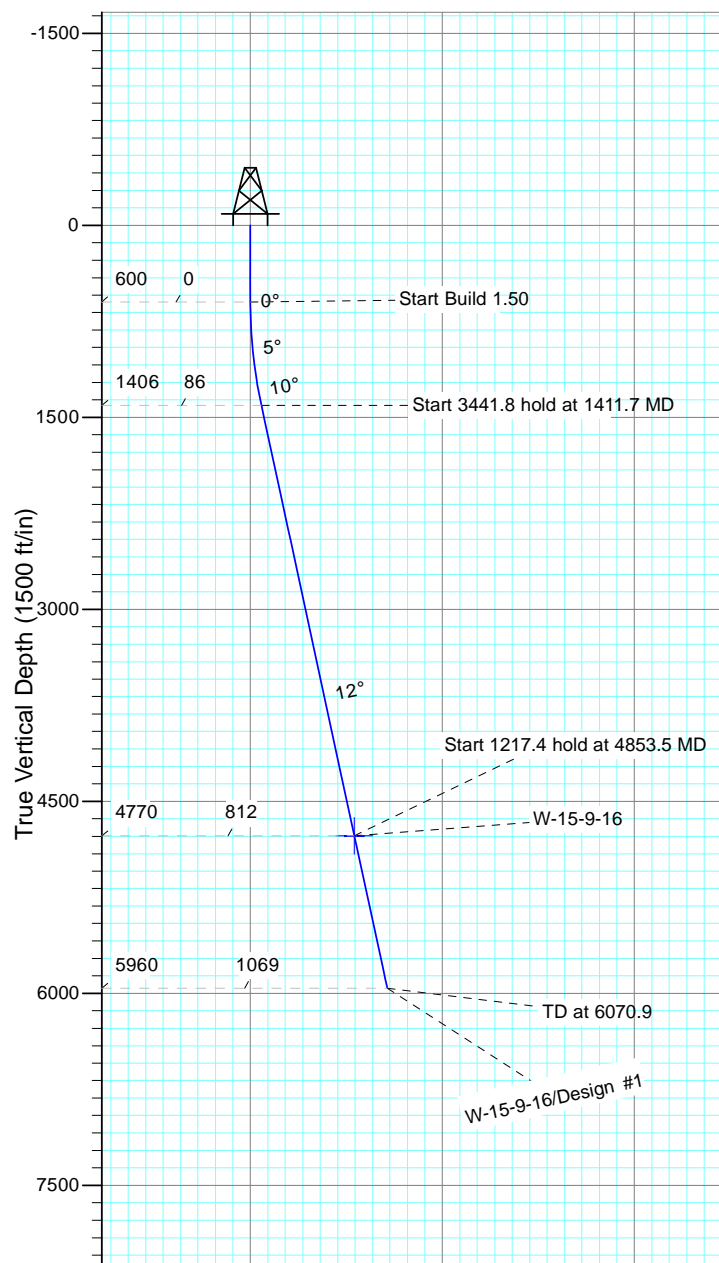


Project: USGS Myton SW (UT)  
Site: SECTION 22 T9, R16  
Well: W-15-9-16  
Wellbore: Wellbore #1  
Design: Design #1



Azimuths to True North  
Magnetic North: 11.03°

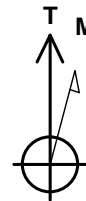
Magnetic Field  
Strength: 52019.8snT  
Dip Angle: 65.71°  
Date: 10/9/2013  
Model: IGRF2010



API Well Number: 43013528590000

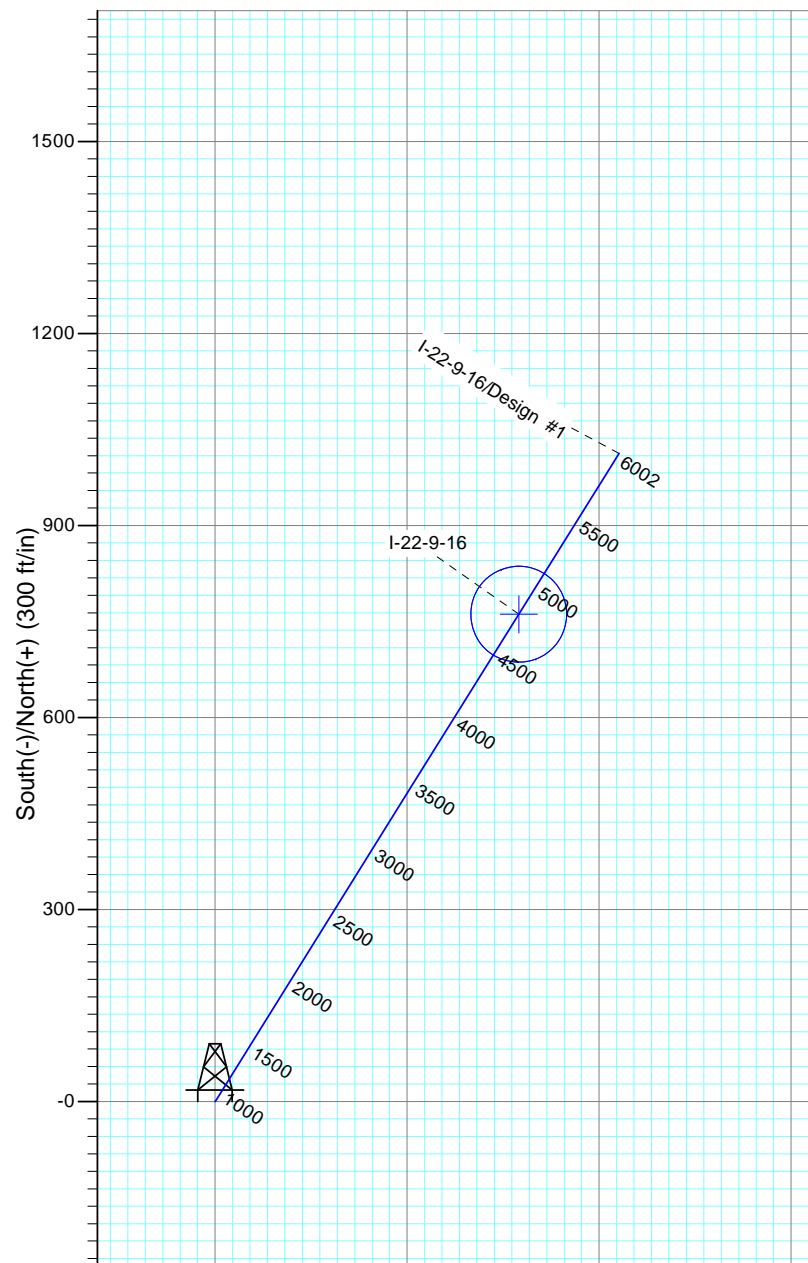
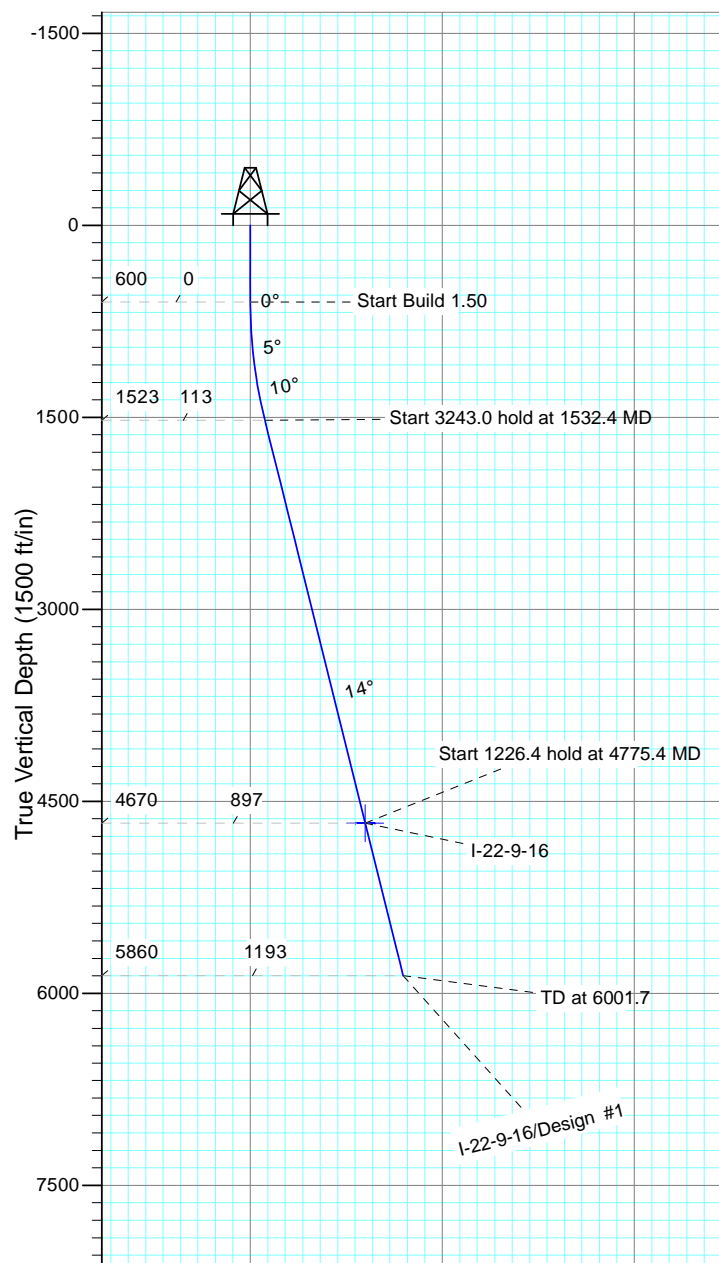


Project: USGS Myton SW (UT)  
Site: SECTION 22 T9, R16  
Well: I-22-9-16  
Wellbore: Wellbore #1  
Design: Design #1



Azimuths to True North  
Magnetic North: 11.03°

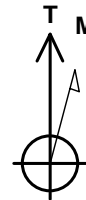
Magnetic Field  
Strength: 52018.4snT  
Dip Angle: 65.71°  
Date: 10/9/2013  
Model: IGRF2010



API Well Number: 43013528590000

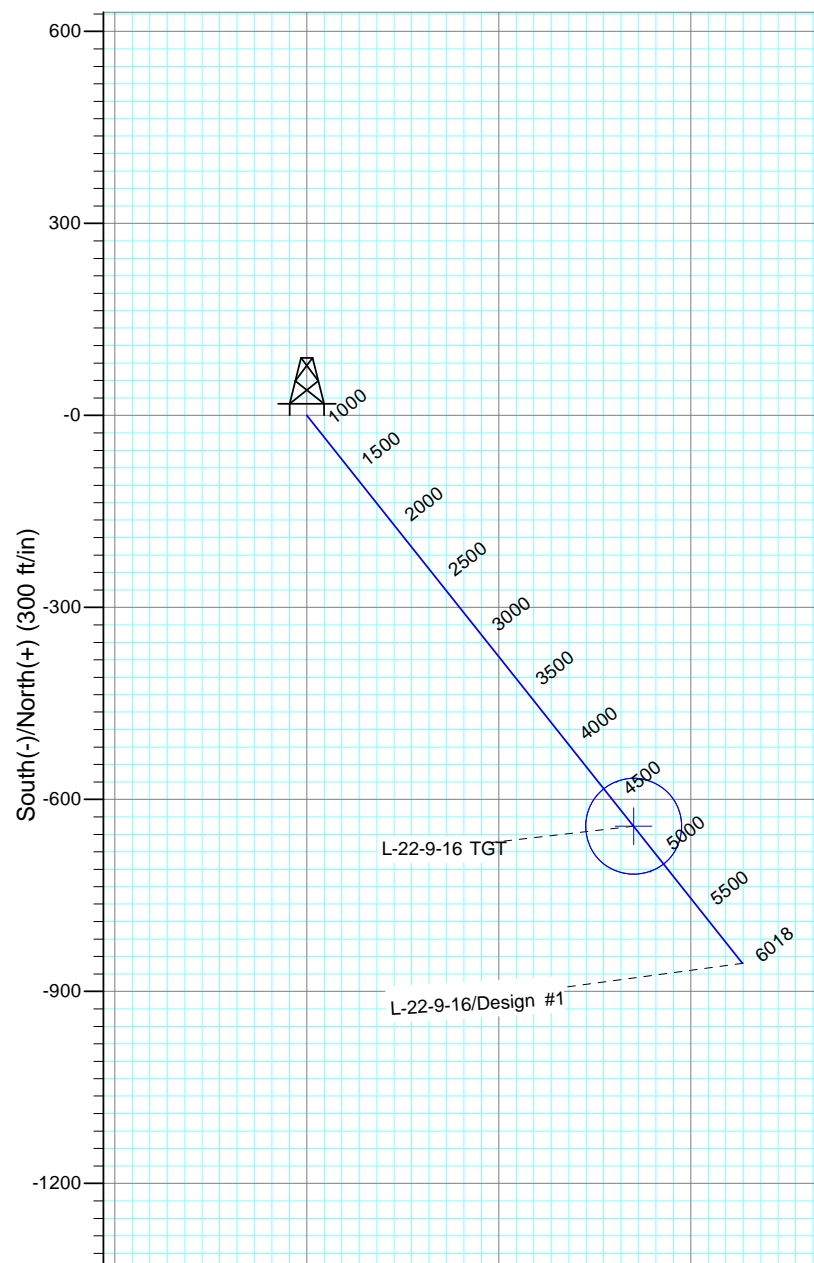
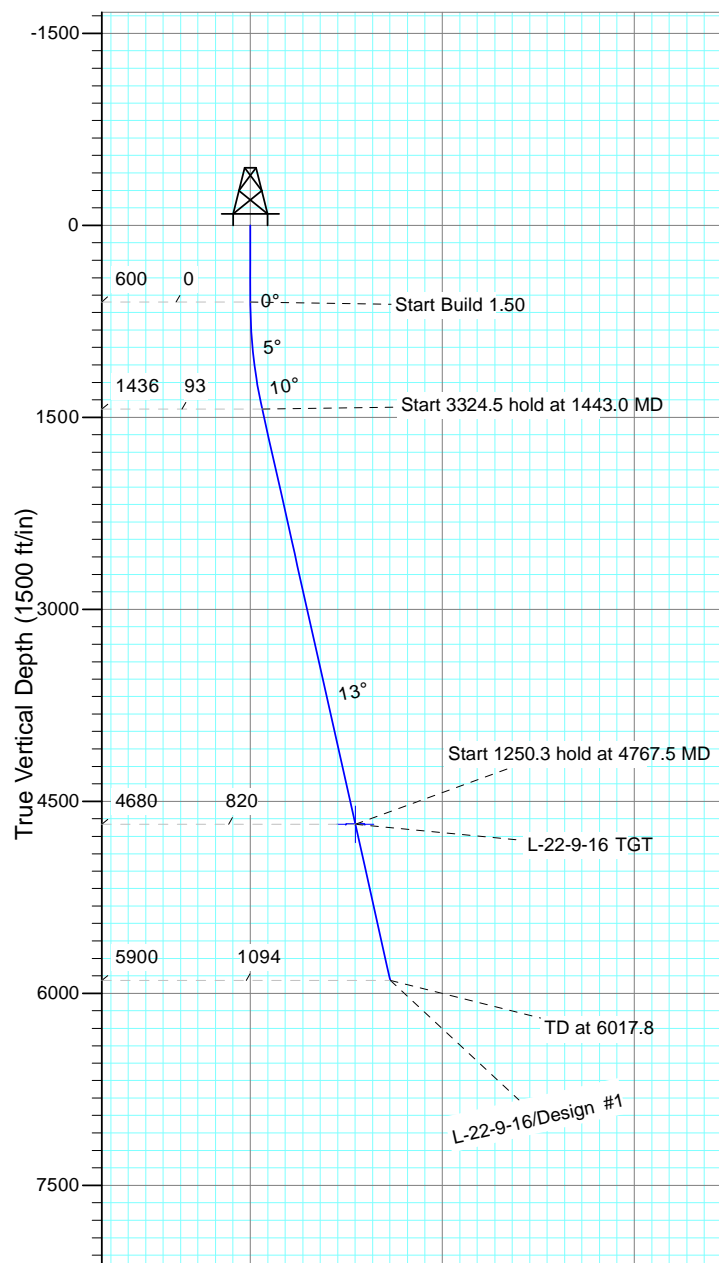


Project: USGS Myton SW (UT)  
Site: SECTION 22 T9, R16  
Well: L-22-9-16  
Wellbore: Wellbore #1  
Desian: Desian #1



Azimuths to True North  
Magnetic North: 11.02°

Magnetic Field  
Strength: 52015.2snT  
Dip Angle: 65.71°  
Date: 10/21/2013  
Model: IGRF2010



API Well Number: 43013528590000

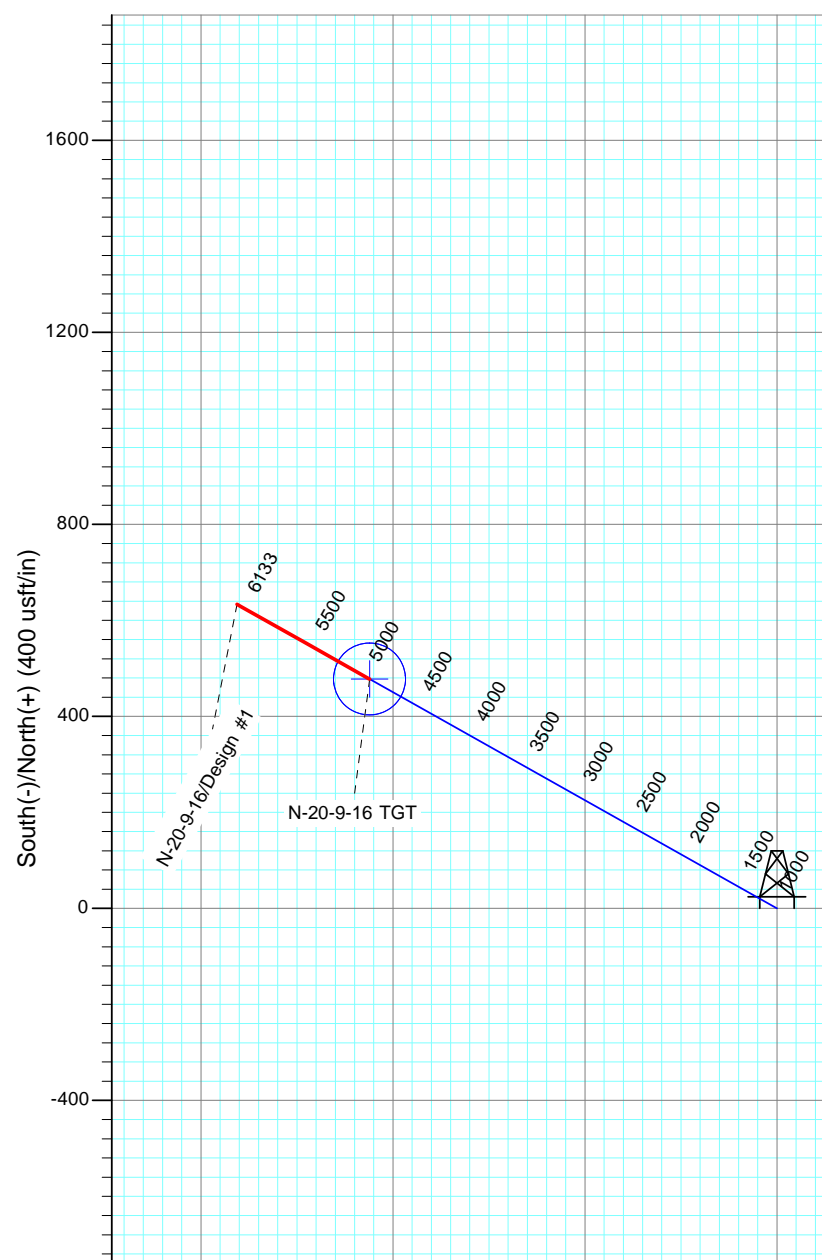
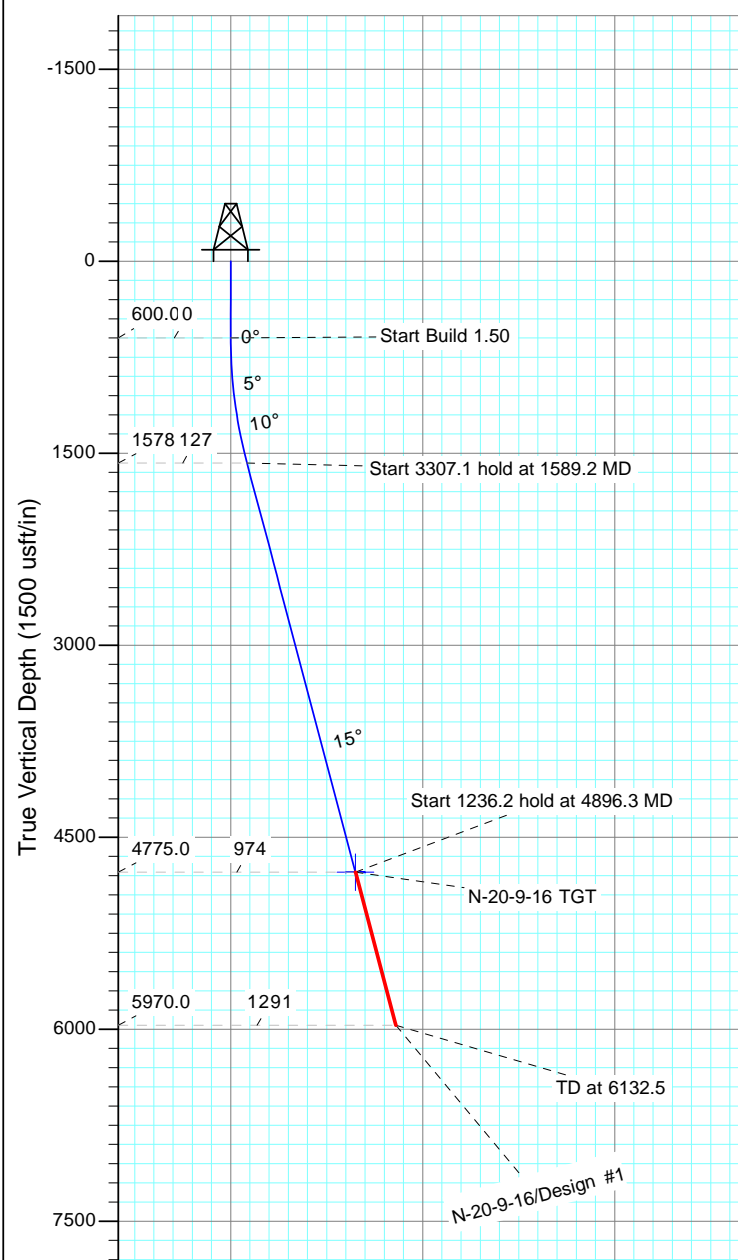


Project: USGS Myton SW (UT)  
Site: SECTION 20 T9, R16  
Well: N-20-9-16  
Wellbore: Wellbore #1  
Design: Design #1



Azimuths to True North  
Magnetic North: 11.05°

Magnetic Field  
Strength: 52011.1snT  
Dip Angle: 65.70°  
Date: 9/30/2013  
Model: IGRF2010



API Well Number: 43013528590000

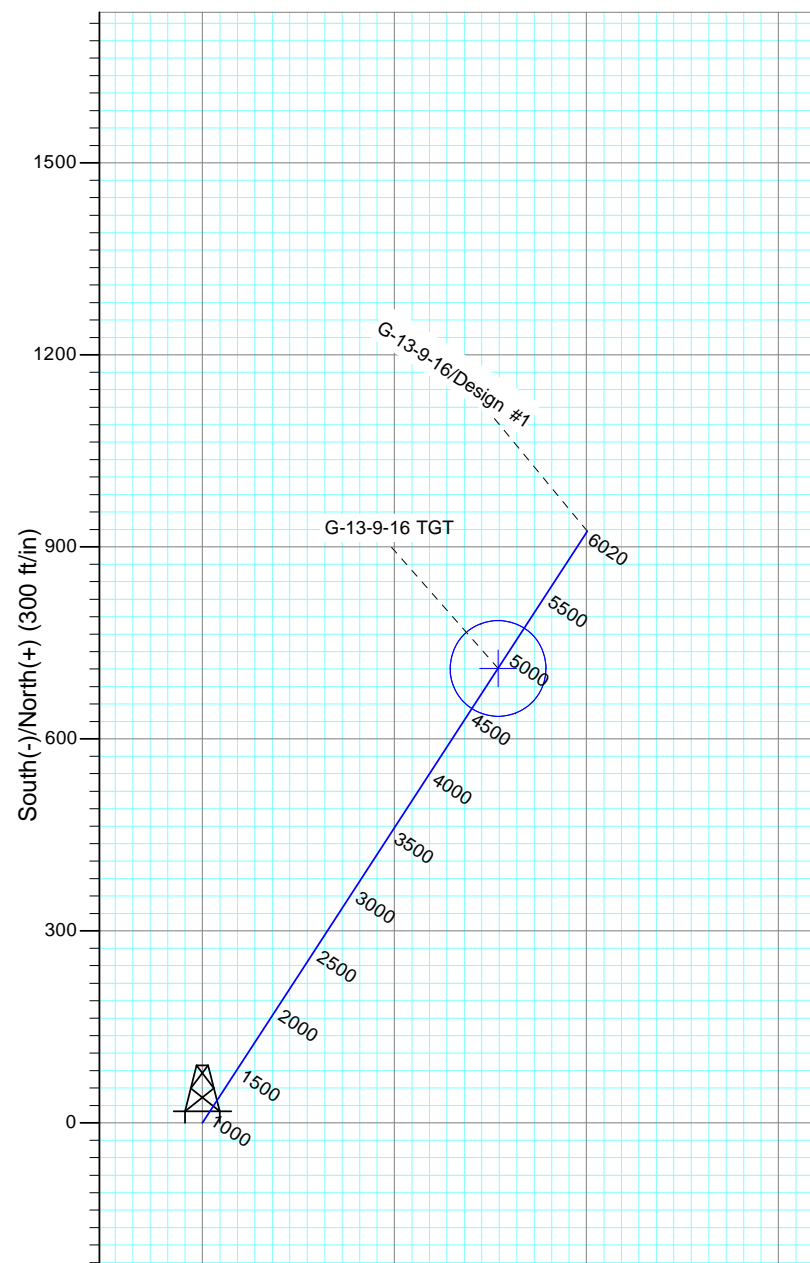
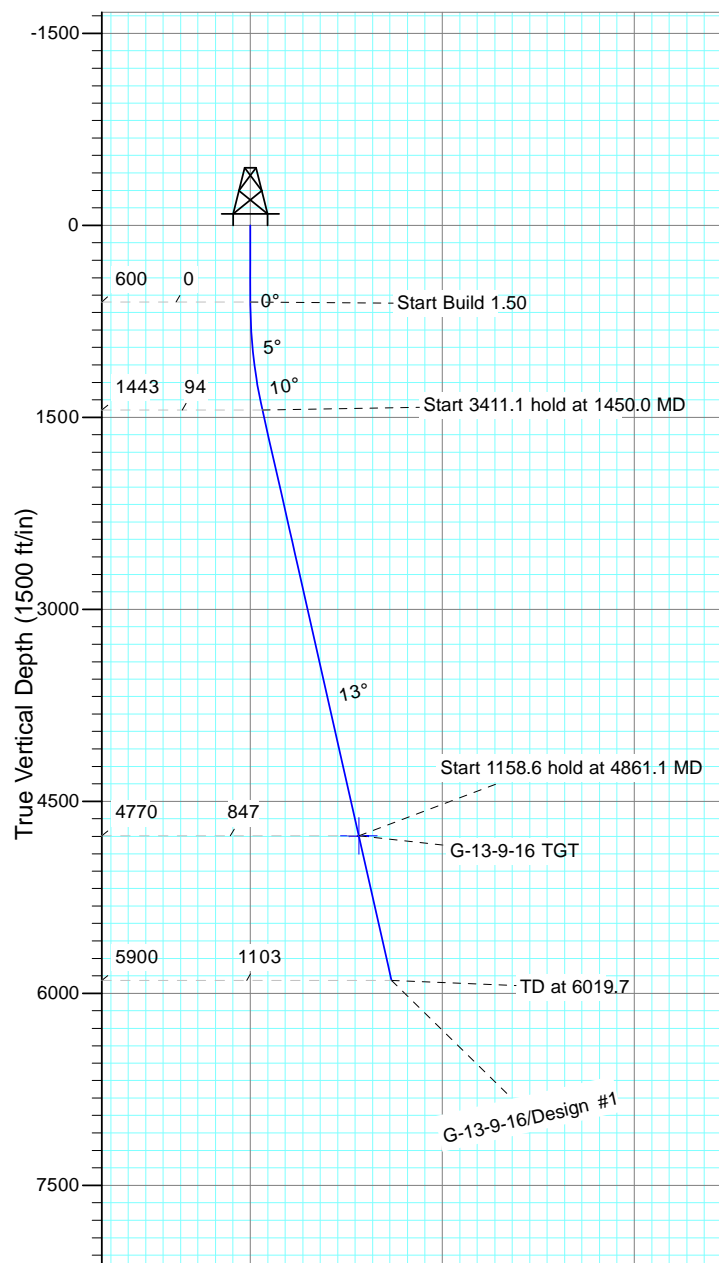


Project: USGS Myton SW (UT)  
Site: SECTION 13 T9S, R16E  
Well: G-13-9-16  
Wellbore: Wellbore #1  
Design: Design #1



Azimuths to True North  
Magnetic North: 11.02°

Magnetic Field  
Strength: 52032.9snT  
Dip Angle: 65.72°  
Date: 10/9/2013  
Model: IGRF2010

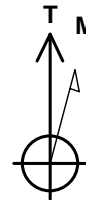




API Well Number: 43013528590000

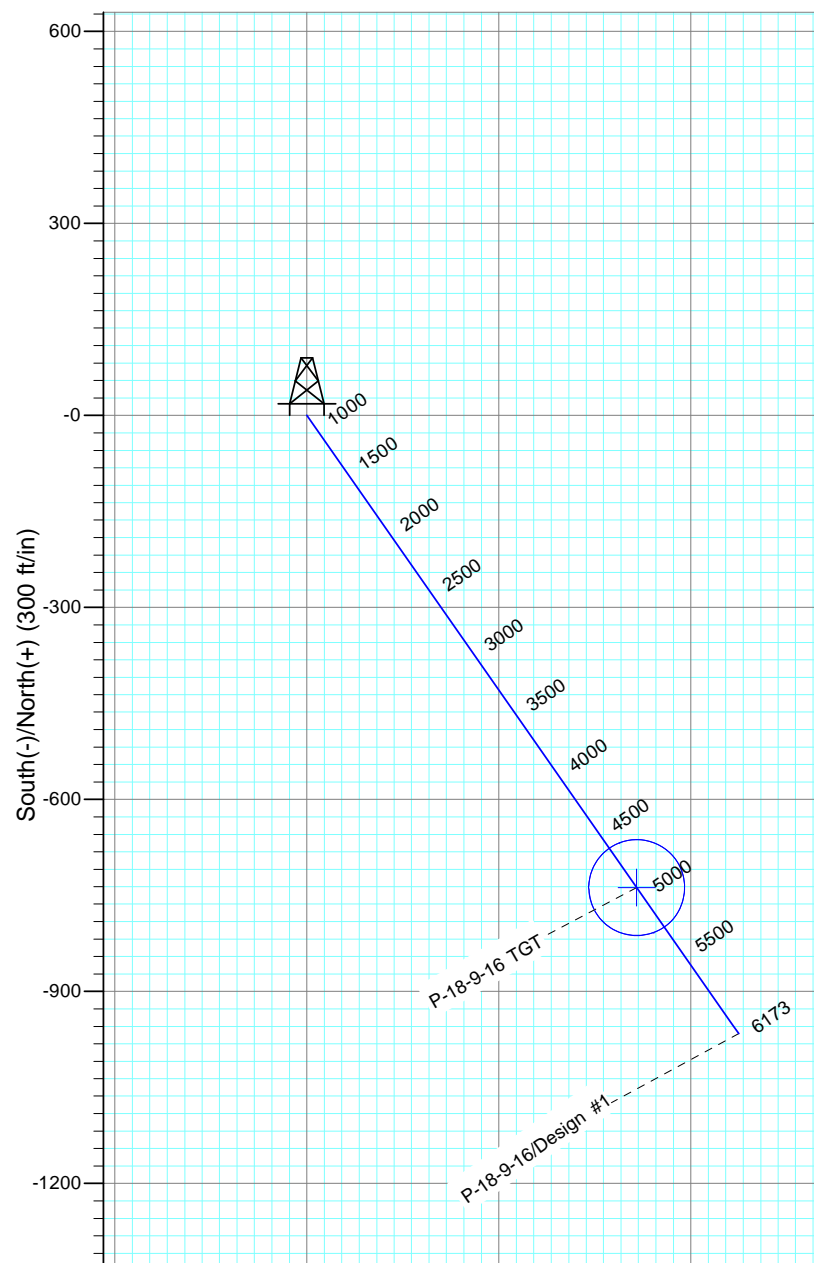
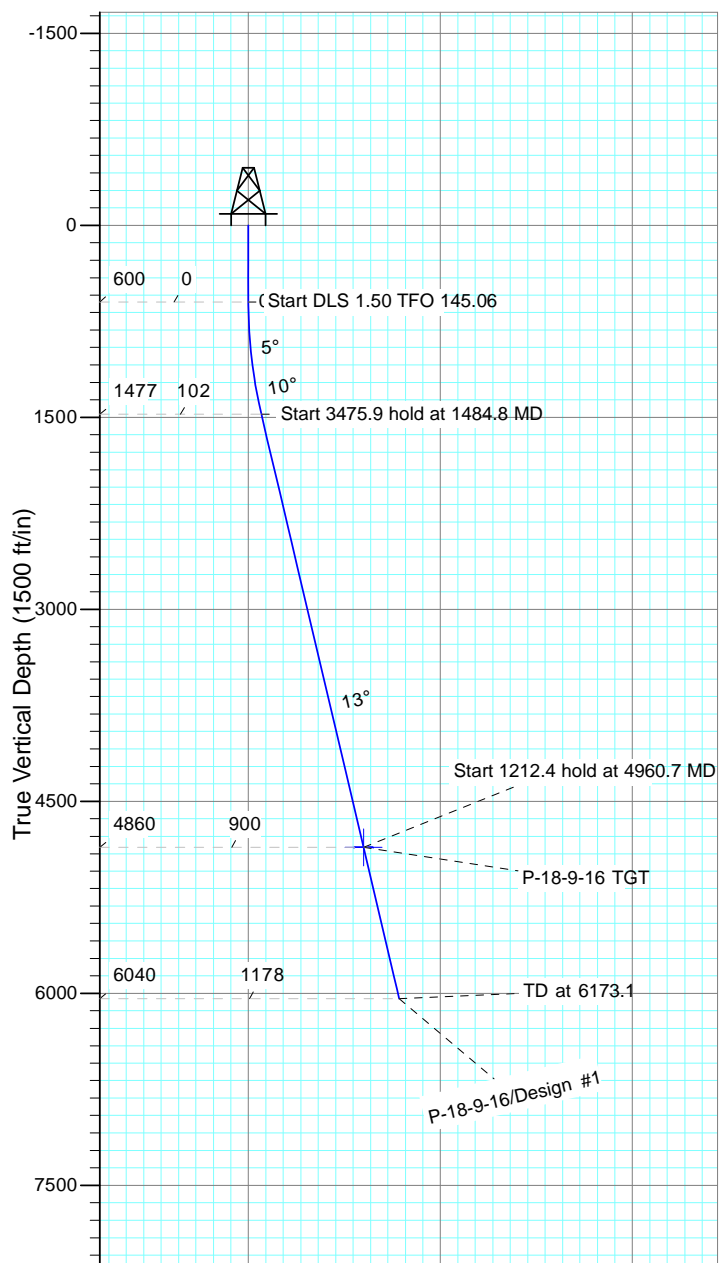


Project: USGS Myton SW (UT)  
Site: SECTION 13 T9, R15  
Well: P-18-9-16  
Wellbore: Wellbore #1  
Design: Design #1



Azimuths to True North  
Magnetic North: 11.05°

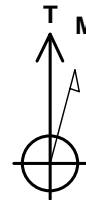
Magnetic Field  
Strength: 52009.6snT  
Dip Angle: 65.70°  
Date: 10/21/2013  
Model: IGRF2010



API Well Number: 43013528590000

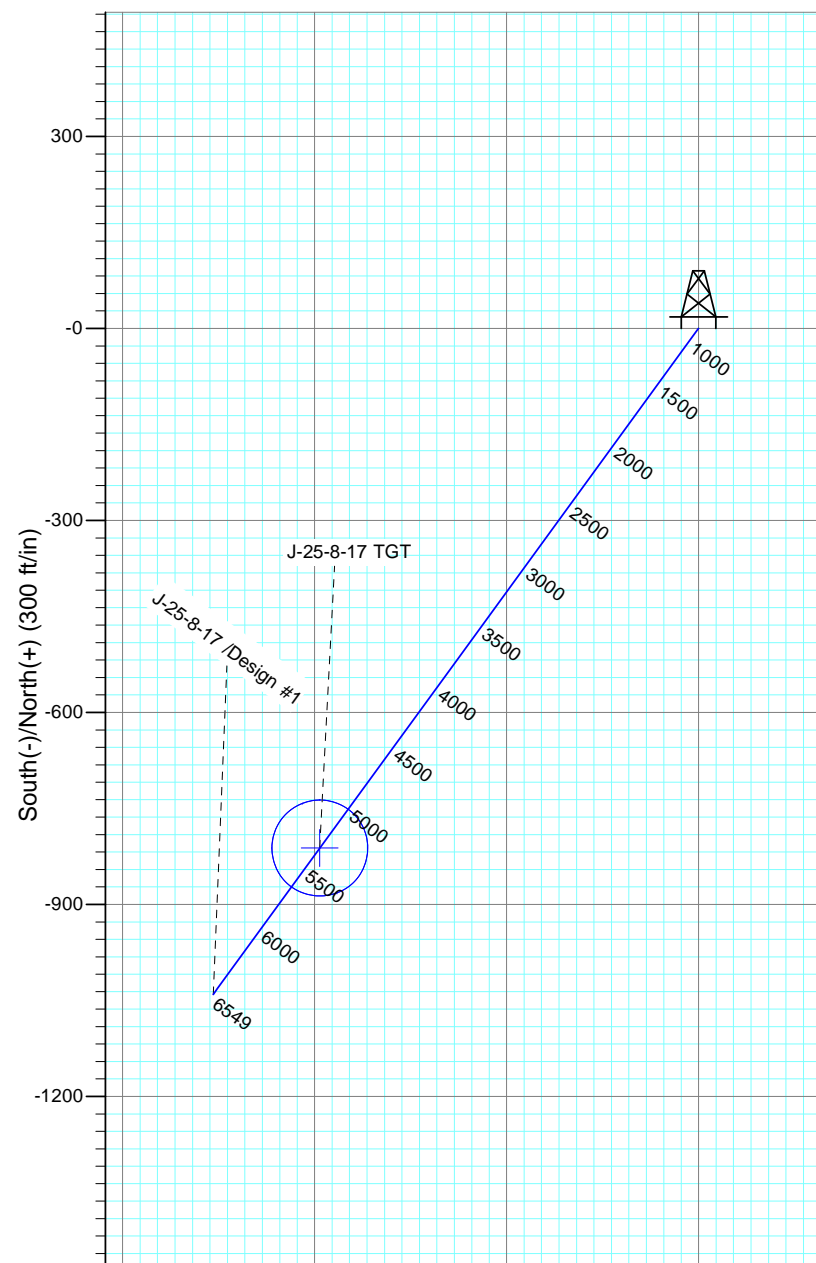
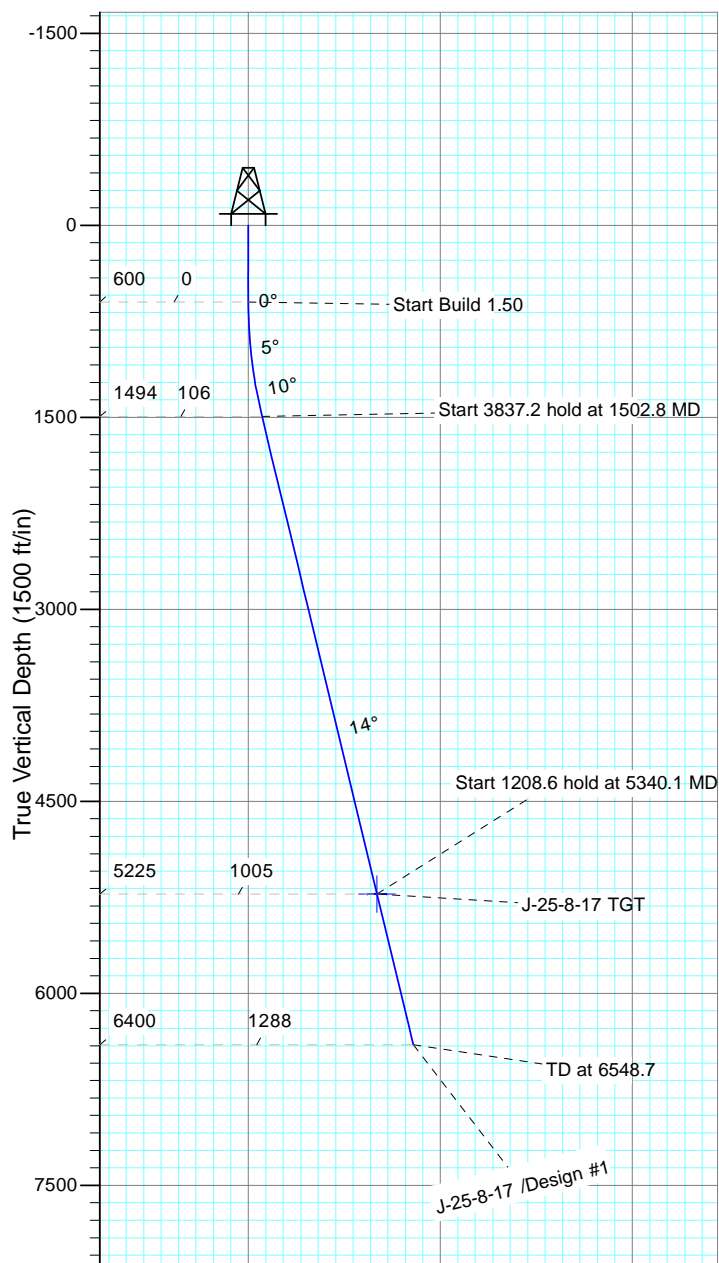


Project: USGS Myton SW (UT)  
Site: SECTION 30 T8, R18  
Well: J-25-8-17  
Wellbore: Wellbore #1  
Desian: Desian #1



Azimuths to True North  
Magnetic North: 10.97°

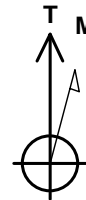
Magnetic Field  
Strength: 52085.6snT  
Dip Angle: 65.80°  
Date: 10/21/2013  
Model: IGRF2010



API Well Number: 43013528590000

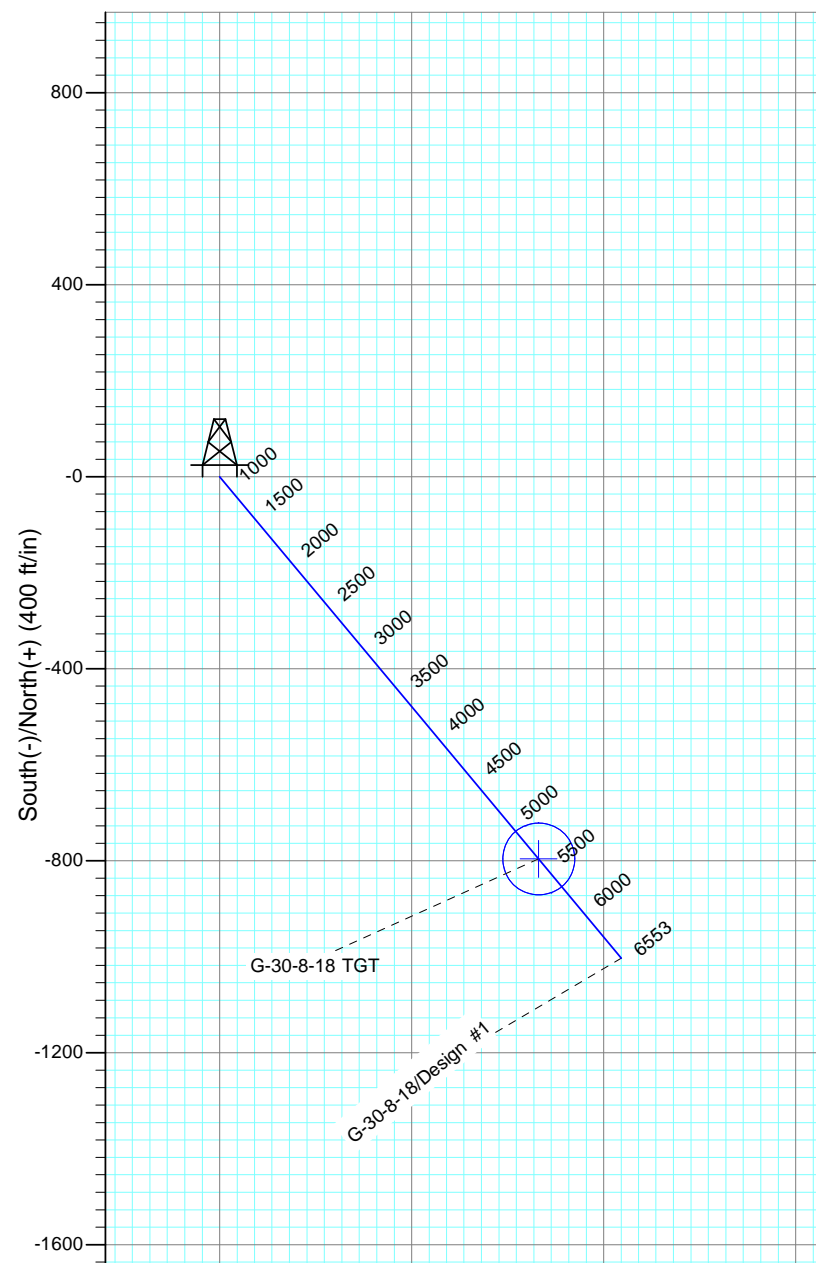
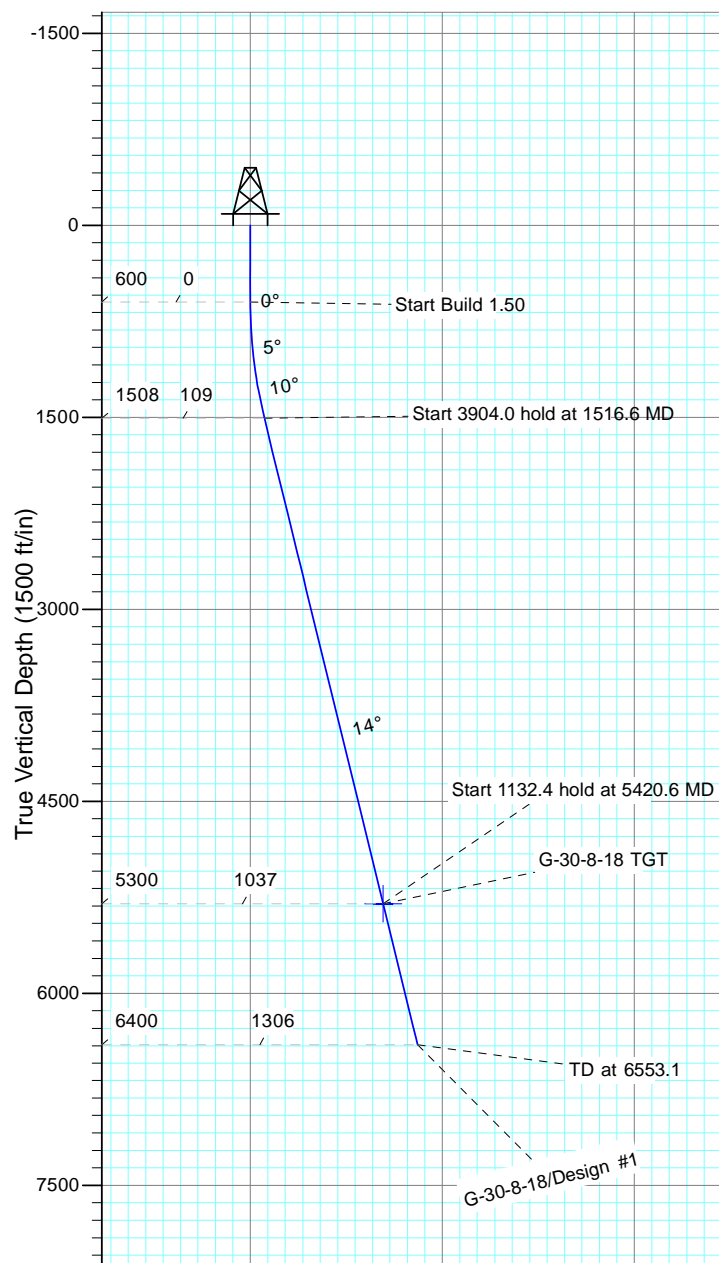


Project: USGS Myton SW (UT)  
Site: SECTION 30 T8, R18  
Well: G-30-8-18  
Wellbore: Wellbore #1  
Design: Design #1



Azimuths to True North  
Magnetic North: 10.97°

Magnetic Field  
Strength: 52085.7snT  
Dip Angle: 65.80°  
Date: 10/21/2013  
Model: IGRF2010



API Well Number: 43013528590000

## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 2/24/2014

API NO. ASSIGNED: 43013528590000

WELL NAME: GMBU O-17-9-16

OPERATOR: NEWFIELD PRODUCTION COMPANY (N2695)

PHONE NUMBER: 435 646-4936

CONTACT: Heather Calder

PROPOSED LOCATION: NESE 18 090S 160E

Permit Tech Review: ☒

SURFACE: 2051 FSL 0440 FEL

Engineering Review: ☐

BOTTOM: 2628 FSL 0219 FWL

Geology Review: ☒

COUNTY: DUCHESNE

LATITUDE: 40.02932

LONGITUDE: -110.15421

UTM SURF EASTINGS: 572166.00

NORTHINGS: 4431354.00

FIELD NAME: MONUMENT BUTTE

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-64379

PROPOSED PRODUCING FORMATION(S): GREEN RIVER

SURFACE OWNER: 1 - Federal

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

☒ PLAT☒ Bond: FEDERAL - WYB000493☐ Potash☐ Oil Shale 190-5☐ Oil Shale 190-3☐ Oil Shale 190-13☒ Water Permit: 437478☐ RDCC Review:☐ Fee Surface Agreement☐ Intent to Commingle

Commingle Approved

## LOCATION AND SITING:

☐ R649-2-3.

Unit: GMBU (GRRV)

☐ R649-3-2. General☐ R649-3-3. Exception☒ Drilling Unit

Board Cause No: Cause 213-11

Effective Date: 11/30/2009

Siting: Suspends General Siting

☒ R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 4 - Federal Approval - dmason  
15 - Directional - dmason  
27 - Other - bhill

RECEIVED: March 04, 2014



GARY R. HERBERT  
*Governor*

SPENCER J. COX  
*Lieutenant Governor*

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

## Permit To Drill

\*\*\*\*\*

**Well Name:** GMBU O-17-9-16  
**API Well Number:** 43013528590000  
**Lease Number:** UTU-64379  
**Surface Owner:** FEDERAL  
**Approval Date:** 3/4/2014

### Issued to:

NEWFIELD PRODUCTION COMPANY , Rt 3 Box 3630 , Myton, UT 84052

### Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 213-11. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

### Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

### Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Production casing cement shall be brought up to or above the top of the unitized interval for the Greater Monument Butte Unit (Cause No. 213-11).

### Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels at 801-538-5284



(please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website  
at <http://oilgas.ogm.utah.gov>

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

**Approved By:**

A handwritten signature in black ink, appearing to read "John Rogers", written over a horizontal line.

For John Rogers  
Associate Director, Oil & Gas

# RECEIVED

FEB 25 2014

FORM APPROVED  
OMB No. 1004-0136  
Expires July 31, 2010

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.

U64379

6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☒ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.  
GMBU

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.  
GMBU O-17-9-16

2. Name of Operator  
NEWFIELD EXPLORATION

Contact: HEATHER CALDER  
E-Mail: hcalder@newfield.com

9. API Well No.

43 013 52859

3a. Address  
ROUTE 3 BOX 3630  
MYTON, UT 84052

3b. Phone No. (include area code)  
Ph: 435-646-4936  
Fx: 435-646-4936

10. Field and Pool, or Exploratory  
MONUMENT BUTTE

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)

At surface NESE 2051FSL 440FEL

At proposed prod. zone NWSW 2628FSL 219FWL

11. Sec., T., R., M., or Blk. and Survey or Area

Sec 18 T9S R16E Mer SLB

Sec 17

14. Distance in miles and direction from nearest town or post office\*  
13.6 MILES SOUTH OF MYTON, UT

12. County or Parish  
DUCHESNE

13. State  
UT

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)  
219'

16. No. of Acres in Lease  
1626.40

17. Spacing Unit dedicated to this well  
20.00

18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.  
1455'

19. Proposed Depth  
6152 MD  
6080 TVD

20. BLM/BIA Bond No. on file  
WYB000493

21. Elevations (Show whether DF, KB, RT, GL, etc.)  
6080 GL

22. Approximate date work will start  
04/01/2014

23. Estimated duration  
7 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature  
(Electronic Submission)

Name (Printed/Typed)  
HEATHER CALDER Ph: 435-646-4936

Date  
02/24/2014

Title  
PRODUCTION TECHNICIAN

Approved by (Signature)

Name (Printed/Typed)

Jerry Kenczka

Date  
AUG 07 2014

Title  
Assistant Field Manager  
Lands & Mineral Resources

Office

VERNAL FIELD OFFICE

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #236473 verified by the BLM Well Information System  
For NEWFIELD EXPLORATION, sent to the Vernal  
Committed to AFMSS for processing by LESLIE BUHLER on 02/26/2014 ()

RECEIVED

AUG 29 2014

DIV. OF OIL, GAS & MINING

UDOGM

NOTICE OF APPROVAL

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company: Newfield Exploration  
Well No: GMBU O-17-9-16  
API No: 43-013-52859

Location: NESE SEC 18 T09S R16E  
Lease No: UTU64379  
Agreement: UTU87538X

**OFFICE NUMBER: (435) 781-4400**

**OFFICE FAX NUMBER: (435) 781-3420**

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

- |                                                                 |                                                                                                                                                                     |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Location Construction<br>(Notify Environmental Scientist)       | - Forty-Eight (48) hours prior to construction of location and access roads.                                                                                        |
| Location Completion<br>(Notify Environmental Scientist)         | - Prior to moving on the drilling rig.                                                                                                                              |
| Spud Notice<br>(Notify Petroleum Engineer)                      | - Twenty-Four (24) hours prior to spudding the well.                                                                                                                |
| Casing String & Cementing<br>(Notify Supv. Petroleum Tech.)     | - Twenty-Four (24) hours prior to running casing and cementing all casing strings to:<br><a href="mailto:blm_ut_vn_opreport@blm.gov">blm_ut_vn_opreport@blm.gov</a> |
| BOP & Related Equipment Tests<br>(Notify Supv. Petroleum Tech.) | - Twenty-Four (24) hours prior to initiating pressure tests.                                                                                                        |
| First Production Notice<br>(Notify Petroleum Engineer)          | - Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.                      |

**SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**STANDARD STIPULATIONS**

**Minerals and Paleontology**

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

**Green River District Reclamation Guidelines**

The Operator will comply with the requirements of the ***Green River District (GRD) Reclamation Guidelines*** formalized by Green River District Instructional Memo UTG000-2014-004 on May 21, 2014.

**CONDITIONS OF APPROVAL**

**Wildlife**

**In accordance with the Record of Decision for the Castle Peak and Eightmile Flat Oil and Gas Expansion Project, Newfield Rocky Mountains Inc., the following COA's are required:**

- WFM-1 On level or gently sloping ground (5 percent slope or less) Newfield will elevate surface pipelines (4 inches or greater in diameter) a minimum of 6 inches above the ground to allow passage of small animals beneath the pipe. This ground clearance will be achieved by placing the pipeline on blocks at intervals of 150 to 200 feet.
- WFM-4 Newfield will install noise reduction devices on all pump jacks to reduce intermittent noise to 45 dBA at 660 feet from the source.

**COA's derived from mitigating measures in the EA:**

**If construction and drilling is anticipated during any of the following wildlife seasonal spatial restrictions, a BLM biologist or a qualified consulting firm biologist must conduct applicable surveys using an accepted protocol prior to any ground disturbing activities.**

- If it is anticipated that construction or drilling will occur during Mountain plover nesting season (May 1 – June 15), a BLM biologist will be notified to determine if surveys are necessary prior to beginning operations. If surveys are deemed necessary, depending on the results permission to proceed may or may not, be granted by the BLM Authorized Officer.

**For protection of T&E Fish if drawing water from the Green River**

- For areas of fresh water collection, an infiltration gallery will be constructed in a Service approved location. An infiltration gallery is basically a pit or trench dug within the floodplain to a depth below



the water table. Water is drawn from the pit rather than from the river directly. If this is not possible, limit pumping within the river to off-channel locations that do not connect to the river during high spring flows.

- If water cannot be drawn using the measures above and the pump head will be located in the river channel where larval fish are known to occur, the following measures apply:
  - Avoid pumping from low-flow or no-flow areas as these habitats tend to concentrate larval fish
  - Avoid pumping to the greatest extent possible, during that period of the year when larval fish may be present (see previous bullet); and
  - Avoid pumping, to the greatest extent possible, during the midnight hours (10:00 p.m. to 2:00 a.m.) as larval drift studies indicate that this is a period of greatest daily activity. Dusk is the preferred pumping time, as larval drift abundance is lowest during this time.
  - Screen all pump intakes with 3/32-inch mesh material.
- Report any fish impinged on the intake screen to the FWS office (801.975.3330) and the:  
Utah Division of Wildlife Resources  
Northeastern Region  
318 N Vernal Ave.  
Vernal, UT 84078  
(435) 781-9453

### **Air Quality**

1. All internal combustion equipment will be kept in good working order.
2. Water or other approved dust suppressants will be used at construction sites and along roads, as determined appropriate by the Authorized Officer. Dust suppressant such as magnesium chloride or fresh water may be used, as needed, during the drilling phase.
3. Open burning of garbage or refuse will not occur at well sites or other facilities.
4. Drill rigs will be equipped with Tier II or better diesel engines.
5. Low bleed pneumatics will be installed on separator dump valves and other controllers.
6. During completion, no venting will occur, and flaring will be limited as much as possible. Production equipment and gathering lines will be installed as soon as possible.
7. Telemetry will be installed to remotely monitor and control production.
8. When feasible, two or more rigs (including drilling and completion rigs) will not be run simultaneously within 200 meters of each other. If two or more rigs must be run simultaneously within 200 meters of each other, then effective public health buffer zones out to 200 meters (m) from the nearest emission source will be implemented. Examples of an effective public health protection buffer zone include the demarcation of a public access exclusion zone by signage at intervals of every 250 feet that is visible from a distance of 125 feet during daylight hours, and a physical buffer such as active surveillance to ensure the property is not accessible by the public during drilling operations. Alternatively, the proponent may demonstrate compliance with the 1-hour NO<sub>2</sub> National Ambient Air Quality Standards (NAAQS) with appropriate and accepted near-field modeling. As part of this demonstration, the proponent may propose alternative mitigation that could include but is not limited to natural gas-fired drill rigs, installation of NO<sub>x</sub> controls, time/use restrictions, and/or drill rig spacing.
9. All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horse power must not emit more than 2 grams of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower-hour.

10. All new and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 grams of NO<sub>x</sub> per horsepower-hour.
11. Green completions will be used for all well completion activities where technically feasible.

**DOWNHOLE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**SITE SPECIFIC DOWNHOLE COAs:**

1. Production casing cement shall be brought up and into the surface.
2. Surface casing cement shall be brought to surface.

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in CD (compact disc) format to the Vernal BLM Field Office. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

#### **OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at [www.ONRR.gov](http://www.ONRR.gov).
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.



- Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.
- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.

- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig Name/# Ross 29 Submitted By  
Branden Arnold Phone Number 435-401-0223  
Well Name/Number GMBU O-17-9-16  
Qtr/Qtr NE/SE Section 18 Township 9S Range 16E  
Lease Serial Number UTU-64379  
API Number 43-013-52859

Spud Notice – Spud is the initial spudding of the well, not drilling  
out below a casing string.

Date/Time 9/24/14 8:00 AM ☒ PM ☐

Casing – Please report time casing run starts, not cementing  
times.

- ☒ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

Date/Time 9/24/14 3:00 AM ☐ PM ☒

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Remarks \_\_\_\_\_

---

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-64379
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052		<b>8. WELL NAME and NUMBER:</b> GMBU O-17-9-16
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2051 FSL 0440 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESE Section: 18 Township: 09.0S Range: 16.0E Meridian: S		<b>9. API NUMBER:</b> 43013528590000
<b>PHONE NUMBER:</b> 435 646-4825 Ext		<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: <b>9/24/2014</b>	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 On 9/24/14 drill and set 9' of 14" conductor. Drill f/9' to 331'KB of 12 1/4" hole. P/U and run 7 joints of 8 5/8" casing set depth 321'KB. On 10/1/14 cement with Halliburton with 155 sx of 15.8# 1.19 yield class G Neat cement. Returned 5 bbls back to pit and bumped plug to 250 psi.

Accepted by the  
Utah Division of  
Oil, Gas and Mining

**FOR RECORD ONLY**

October 14, 2014

<b>NAME (PLEASE PRINT)</b> Cherei Neilson	<b>PHONE NUMBER</b> 435 646-4883	<b>TITLE</b> Drilling Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 10/13/2014	

**NEWFIELD****Casing****Conductor**

Legal Well Name GMBU O-17-9-16		Wellbore Name Original Hole	
API/UWI 43013528590000	Surface Legal Location NESE 2051 FSL 440 FEL Sec 18 T9S R16E	Field Name GMBU CTB3	Well Type Development
Well RC 500390638	County Duchesne	State/Province Utah	Spud Date
		Final Rig Release Date	

<b>Wellbore</b>					
Wellbore Name Original Hole				Kick Off Depth (ftKB)	
Section Des	Size (in)	Actual Top Depth (MD) (ftKB)	Actual Bottom Depth (MD) (ftKB)	Start Date	End Date
Conductor	14	11	20	9/24/2014	9/24/2014

<b>Wellhead</b>			
Type	Install Date	Service	Comment

<b>Wellhead Components</b>				
Des	Make	Model	SN	WP Top (psi)

<b>Casing</b>			
Casing Description Conductor	Set Depth (ftKB) 20	Run Date 9/24/2014	Set Tension (kips)
Centralizers	Scratchers		

<b>Casing Components</b>												
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Jts	Len (ft)	Top (ftKB)	Btm (ftKB)	Mk-up Tq (ft-lb)	Class	Max OD (in)
Conductor	14	13.500	36.75	H-40	Welded	1	9.00	11.0	20.0			

<b>Jewelry Details</b>							
<b>External Casing Packer</b>							
Type	Setting Requirement	Release Requirements			Inflation Method	Vol Inflation (gal)	Equiv Hole Sz (in)
Inflation Fluid Type	Infl FI Dens (lb/gal)	P AV Set (psi)	AV Acting Pressure (psi)	P ICV Set (psi)	P ICV Act (psi)	ECP Load (1000lbf)	Seal Load (1000lbf)

<b>Slotted Liner</b>							
% Open Area (%)	Perforation Min Dimension (in)	Perforation Max Dimension (in)	Axial Perf Spacing (ft)	Perf Rows	Blank Top Length (ft)	Blank Bottom Length (ft)	
Slot Description	Slot Pattern			Slot Length (in)	Slot Width (in)	Slot Frequency	Screen Gauge (ga)

<b>Liner Hanger</b>			
Retrievable?	Elastomer Type	Element Center Depth (ft)	Polish Bore Size (in)
		Polish Bore Length (ft)	
Slip Description		Set Mechanics	

Setting Procedure			
Unsetting Procedure			



**NEWFIELD****Casing****Surface**

Legal Well Name GMBU O-17-9-16		Wellbore Name Original Hole	
API/UWI 43013528590000	Surface Legal Location NESE 2051 FSL 440 FEL Sec 18 T9S R16E	Field Name GMBU CTB3	Well Type Development
Well RC 500390638	County Duchesne	State/Province Utah	Spud Date
		Final Rig Release Date	

<b>Wellbore</b>					
Wellbore Name Original Hole				Kick Off Depth (ftKB)	
Section Des	Size (in)	Actual Top Depth (MD) (ftKB)	Actual Bottom Depth (MD) (ftKB)	Start Date	End Date
Conductor	14	11	20	9/24/2014	9/24/2014
Vertical	12 1/4	20	331	9/24/2014	9/24/2014

<b>Wellhead</b>			
Type	Install Date	Service	Comment

<b>Wellhead Components</b>				
Des	Make	Model	SN	WP Top (psi)

<b>Casing</b>			
Casing Description Surface	Set Depth (ftKB) 321	Run Date 9/24/2014	Set Tension (kips)
Centralizers 3	Scratchers		

<b>Casing Components</b>												
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Jts	Len (ft)	Top (ftKB)	Btm (ftKB)	Mk-up Tq (ft-lb)	Class	Max OD (in)
Wellhead	8 5/8	8.097	24.00	J-55	ST&C	1	2.00	11.0	13.0			
Cut Off	8 5/8	8.097	24.00	J-55	ST&C	1	41.78	13.0	54.8			
Casing Joints	8 5/8	8.097	24.00	J-55	ST&C	5	219.93	54.8	274.7			
Float Collar	8 5/8	8.097	24.00	J-55	ST&C	1	1.00	274.7	275.7			
Casing Joints	8 5/8	8.097	24.00	J-55	ST&C	1	43.63	275.7	319.3			
Guide Shoe	8 5/8	8.097	24.00	J-55	ST&C	1	1.50	319.3	320.8			

<b>Jewelry Details</b>									
<b>External Casing Packer</b>									
Type	Setting Requirement	Release Requirements			Inflation Method	Vol Inflation (gal)	Equiv Hole Sz (in)		
Inflation Fluid Type	Infl Fl Dens (lb/gal)	P AV Set (psi)	AV Acting Pressure (psi)	P ICV Set (psi)	P ICV Act (psi)	ECP Load (1000lbf)	Seal Load (1000lbf)		

<b>Slotted Liner</b>							
% Open Area (%)	Perforation Min Dimension (in)	Perforation Max Dimension (in)	Axial Perf Spacing (ft)	Perf Rows	Blank Top Length (ft)	Blank Bottom Length (ft)	
Slot Description	Slot Pattern			Slot Length (in)	Slot Width (in)	Slot Frequency	Screen Gauge (ga)

<b>Liner Hanger</b>			
Retrievable?	Elastomer Type	Element Center Depth (ft)	Polish Bore Size (in)
Slip Description		Set Mechanics	

Setting Procedure
Unsetting Procedure

BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig Name/# NDSI SS #1  
Submitted By Xabier Lasa Phone Number 435-823-6014  
Well Name/Number GMBU O-17-9-16  
Qtr/Qtr NE/SE Section 17 Township 9S Range 16E *SEC 18*  
Lease Serial Number UTU64379  
API Number 43-013-52859

TD Notice – TD is the final drilling depth of hole.

Date/Time 10/17/14 8:00 AM ☒ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing
- ☐ Intermediate Casing
- ☒ Production Casing
- ☐ Liner
- ☐ Other

Date/Time 10/17/14 6:00 AM ☐ PM ☒

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-64379
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052		<b>8. WELL NAME and NUMBER:</b> GMBU O-17-9-16
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2051 FSL 0440 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESE Section: 18 Township: 09.0S Range: 16.0E Meridian: S		<b>9. API NUMBER:</b> 43013528590000
<b>PHONE NUMBER:</b> 435 646-4825 Ext		<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 11/5/2014	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input checked="" type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. The above well was placed on production on 11/05/2014 at 18:20 hours.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> November 25, 2014		
<b>NAME (PLEASE PRINT)</b> Jennifer Peatross	<b>PHONE NUMBER</b> 435 646-4885	<b>TITLE</b> Production Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/21/2014	

Form 3160-4  
(March 2012)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0137  
Expires: October 31, 2014

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other  
 b. Type of Completion: ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.,  
 Other: \_\_\_\_\_

2. Name of Operator  
 NEWFIELD PRODUCTION COMPANY

3. Address ROUTE #3 BOX 3630  
 MYTON, UT 84052

3a. Phone No. (include area code)  
 Ph: 435-646-3721

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*

At surface 2051' FSL 440' FEL (NE/SE) SEC 18 T9S R16E (UTU-64379)

At top prod. interval reported below 2431' FSL 2' FEL (NE/SE) SEC 18 T9S R16E (UTU-64379)

At total depth 2642' FSL 234' FWL (SW/SW) SEC 17 T9S R16E (UTU-52018)

14. Date Spudded  
 09/24/2014

15. Date T.D. Reached  
 10/18/2014

16. Date Completed 11/05/2014  
☐ D & A ☒ Ready to Prod.

17. Elevations (DF, RKB, RT, GL)\*  
 6080' GL 6091' KB

18. Total Depth: MD 6257'  
 TVD 6185'

19. Plug Back T.D.: MD 6200'  
 TVD

20. Depth Bridge Plug Set: MD  
 TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)  
 DUAL IND GRD, SP, COMP. NEUTRON, GR, CALIPER, CMT BOND

22. Was well cored? ☒ No ☐ Yes (Submit analysis)  
 Was DST run? ☒ No ☐ Yes (Submit report)  
 Directional Survey? ☐ No ☒ Yes (Submit copy)

## 23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12-1/4"	8-5/8" J-55	24	0'	321'		155 CLASS G			
7-7/8"	5-1/2" J-55	15.50	0'	6247'		280 Econocem		0'	
						470 Expandacem			

## 24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2-7/8"	EOT@5933'	TA@5775'						

## 25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Green River	4221'	5808'	4221' - 5808' MD	0.34	70	
B)						
C)						
D)						

## 27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
4221' - 5808' MD	Frac w/ 338,760#s of 20/40 white sand in 3,325 bbls of Lightning 17 fluid, in 5 stages.

## 28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
11/15/14	11/15/14	24	→	130	141	43			2.5 x 1.75 x 20 x 22 RHAC
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→					PRODUCING	

## 28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

\*(See instructions and spaces for additional data on page 2)

28b. Production<sup>h</sup> - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

28c. Production<sup>h</sup> - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

29. Disposition of Gas (Solid, used for fuel, vented, etc.)

## 30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers  
GEOLOGICAL MARKERS

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
				GARDEN GULCH MARK GARDEN GULCH 1	3729' 3951'
				GARDEN GULCH 2 POINT 3	4056' 4310'
				X MRKR Y MRKR	4577' 4610'
				DOUGLAS CREEK MRK BI CARBONATE MRK	4722' 4948'
				B LIMESTONE MRK CASTLE PEAK	5043' 5628'
				BASAL CARBONATE WASATCH	6093' 6223'

32. Additional remarks (include plugging procedure):

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☐ Electrical/Mechanical Logs (1 full set req'd.)     
 ☐ Geologic Report     
 ☐ DST Report     
 ☒ Directional Survey  
☐ Sundry Notice for plugging and cement verification     
 ☐ Core Analysis     
 ☒ Other: Drilling daily activity

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)\*

Name (please print) Heather CalderTitle Regulatory TechnicianSignature Heather CalderDate 11/25/2014

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 3)

(Form 3160-4, page 2)



## **NEWFIELD EXPLORATION**

**USGS Myton SW (UT)  
SECTION 17 T9, R16  
O-17-9-16  
Wellbore #1**

**Design: Actual**

## **End of Well Report**

**20 October, 2014**







# Payzone Directional

## End of Well Report



Sundry Number: 58232 API Well Number: 43013528590000

**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 17 T9, R16  
**Well:** O-17-9-16  
**Wellbore:** Wellbore #1  
**Design:** Actual

**Local Co-ordinate Reference:** Well O-17-9-16  
**TVD Reference:** O-17-9-16 @ 6091.0usft (SS # 1)  
**MD Reference:** O-17-9-16 @ 6091.0usft (SS # 1)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 5000.1 Single User Db

**Project** USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

**Map System:** US State Plane 1983  
**Geo Datum:** North American Datum 1983  
**Map Zone:** Utah Central Zone

**System Datum:** Mean Sea Level

**Site** SECTION 17 T9, R16

**Site Position:** Northing: 7,185,000.00 usft Latitude: 40° 2' 12.729 N  
**From:** Easting: 2,018,000.00 usft Longitude: 110° 9' 4.925 W  
**Position Uncertainty:** Map 0.0 usft Slot Radius: 13-3/16 " Grid Convergence: 0.86 °

**Well** O-17-9-16, SHL: 40 01 45.36 -110 09 15.11

**Well Position** +N/-S 0.0 usft Northing: 7,182,219.12 usft Latitude: 40° 1' 45.360 N  
+E/-W 0.0 usft Easting: 2,017,249.62 usft Longitude: 110° 9' 15.110 W  
**Position Uncertainty** 0.0 usft Wellhead Elevation: 6,091.0 usft Ground Level: 6,080.0 usft

**Wellbore** Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/10/2014	10.92	65.68	51,917

**Design** Actual

<b>Audit Notes:</b>	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
<b>Vertical Section:</b>		Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
		0.0	0.0	0.0	48.73

**Survey Program** Date 10/20/2014

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
379.0	6,257.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard



# Payzone Directional

## End of Well Report



Sundry Number: 58232 API Well Number: 43013528590000

**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Mylon SW (UT)  
**Site:** SECTION 17 T9, R16  
**Well:** O-17-9-16  
**Wellbore:** Wellbore #1  
**Design:** Actual

**Local Co-ordinate Reference:** Well O-17-9-16  
**TVD Reference:** O-17-9-16 @ 6091.0usft (SS # 1)  
**MD Reference:** O-17-9-16 @ 6091.0usft (SS # 1)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 5000.1 Single User Db

Survey	MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)
	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	379.0	0.88	3.93	379.0	2.1	2.9	0.2	0.23	0.23	0.00
	410.0	1.58	2.57	410.0	2.5	3.6	0.2	2.26	2.26	-4.39
	441.0	1.80	9.65	441.0	3.2	4.5	0.3	0.98	0.71	22.84
	471.0	1.89	24.37	470.9	4.0	5.4	0.6	1.60	0.30	49.07
	502.0	2.37	35.09	501.9	5.1	6.4	1.2	2.01	1.55	34.58
	533.0	2.46	46.08	532.9	6.4	7.4	2.0	1.52	0.29	35.45
	564.0	2.78	48.51	563.9	7.8	8.3	3.1	1.09	1.03	7.84
	594.0	3.09	52.49	593.8	9.3	9.3	4.3	1.24	1.03	13.27
	625.0	3.49	53.67	624.8	11.1	10.4	5.7	1.31	1.29	3.81
	656.0	4.09	53.20	655.7	13.2	11.6	7.3	1.94	1.94	-1.52
	687.0	4.26	51.44	686.6	15.4	13.0	9.1	0.69	0.55	-5.68
	717.0	4.57	50.51	716.5	17.7	14.4	10.9	1.06	1.03	-3.10
	748.0	4.92	48.27	747.4	20.3	16.1	12.9	1.28	1.13	-7.23
	779.0	5.23	47.31	778.3	23.0	17.9	14.9	1.04	1.00	-3.10
	810.0	5.63	50.16	809.2	26.0	19.9	17.1	1.56	1.29	9.19
	841.0	5.98	52.93	840.0	29.1	21.8	19.6	1.45	1.13	8.94
	871.0	6.24	51.92	869.8	32.3	23.8	22.1	0.94	0.87	-3.37
	902.0	6.42	51.39	900.7	35.7	25.9	24.8	0.61	0.58	-1.71
	933.0	6.72	53.68	931.4	39.2	28.0	27.6	1.28	0.97	7.39
	964.0	6.81	54.56	962.2	42.9	30.2	30.5	0.44	0.29	2.84
	994.0	7.08	53.50	992.0	46.5	32.3	33.5	1.00	0.90	-3.53
	1,025.0	7.29	51.83	1,022.8	50.3	34.7	36.6	0.96	0.68	-5.39
	1,056.0	7.56	54.16	1,053.5	54.3	37.1	39.8	1.30	0.87	7.52
	1,102.0	8.04	52.76	1,099.1	60.6	40.8	44.8	1.12	1.04	-3.04
	1,146.0	8.31	53.99	1,142.6	66.8	44.5	49.8	0.73	0.61	2.80
	1,191.0	8.44	53.72	1,187.2	73.3	48.4	55.1	0.30	0.29	-0.60

**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Mylon SW (UT)  
**Site:** SECTION 17 T9, R16  
**Well:** O-17-9-16  
**Wellbore:** Wellbore #1  
**Design:** Actual

**Local Co-ordinate Reference:** Well O-17-9-16  
**TVD Reference:** O-17-9-16 @ 6091.0ustf (SS # 1)  
**MD Reference:** O-17-9-16 @ 6091.0ustf (SS # 1)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 5000.1 Single User Db

Survey	MD (ustf)	Inc (°)	Azi (azimuth) (°)	TVD (ustf)	V. Sec (ustf)	N/S (ustf)	E/W (ustf)	DLeg (°/100ustf)	Build (°/100ustf)	Turn (°/100ustf)
	1,237.0	8.61	50.91	1,232.6	80.1	52.6	60.5	0.98	0.37	-6.11
	1,283.0	8.39	51.26	1,278.1	86.9	56.8	65.8	0.49	-0.48	0.76
	1,329.0	8.61	49.90	1,323.6	93.7	61.1	71.0	0.65	0.48	-2.96
	1,375.0	8.75	50.38	1,369.1	100.7	65.6	76.4	0.34	0.30	1.04
	1,421.0	9.05	48.84	1,414.6	107.8	70.2	81.8	0.83	0.65	-3.35
	1,464.0	9.14	47.97	1,457.0	114.6	74.7	86.9	0.38	0.21	-2.02
	1,508.0	9.27	48.45	1,500.5	121.6	79.4	92.1	0.34	0.30	1.09
	1,554.0	9.49	49.20	1,545.8	129.1	84.3	97.7	0.55	0.48	1.63
	1,599.0	9.49	50.03	1,590.2	136.5	89.2	103.4	0.30	0.00	1.84
	1,645.0	9.23	47.66	1,635.6	144.0	94.1	109.0	1.01	-0.57	-5.15
	1,689.0	9.27	48.41	1,679.0	151.1	98.8	114.3	0.29	0.09	1.70
	1,735.0	9.45	47.31	1,724.4	158.6	103.8	119.8	0.55	0.39	-2.39
	1,781.0	9.40	46.78	1,769.8	166.1	109.0	125.4	0.22	-0.11	-1.15
	1,826.0	9.62	48.19	1,814.2	173.5	114.0	130.8	0.71	0.49	3.13
	1,872.0	9.40	49.33	1,859.6	181.1	119.0	136.5	0.63	-0.48	2.48
	1,918.0	9.40	50.56	1,904.9	188.6	123.8	142.3	0.44	0.00	2.67
	1,964.0	9.27	48.67	1,950.3	196.1	128.7	148.0	0.72	-0.28	-4.11
	2,008.0	9.01	48.01	1,993.8	203.1	133.3	153.2	0.64	-0.59	-1.50
	2,052.0	9.10	48.41	2,037.2	210.0	137.9	158.4	0.25	0.20	0.91
	2,097.0	8.96	45.33	2,081.7	217.1	142.7	163.5	1.12	-0.31	-6.84
	2,143.0	8.92	46.30	2,127.1	224.2	147.7	168.6	0.34	-0.09	2.11
	2,187.0	9.32	47.35	2,170.5	231.2	152.5	173.7	0.98	0.91	2.39
	2,231.0	9.71	48.01	2,213.9	238.4	157.4	179.1	0.92	0.89	1.50
	2,277.0	9.89	49.86	2,259.3	246.3	162.5	185.0	0.79	0.39	4.02
	2,322.0	9.84	48.84	2,303.6	254.0	167.6	190.9	0.40	-0.11	-2.27
	2,368.0	9.66	47.60	2,348.9	261.8	172.7	196.7	0.60	-0.39	-2.70
	2,414.0	9.18	46.82	2,394.3	269.3	177.9	202.2	1.08	-1.04	-1.70



# Payzone Directional

## End of Well Report



Sundry Number: 58232 API Well Number: 43013528590000

Company: NEWFIELD EXPLORATION  
Project: USGS Myton SW (UT)  
Site: SECTION 17 T9, R16  
Well: O-17-9-16  
Wellbore: Wellbore #1  
Design: Actual

Local Co-ordinate Reference: Well O-17-9-16  
TVD Reference: O-17-9-16 @ 6091.0usft (SS # 1)  
MD Reference: O-17-9-16 @ 6091.0usft (SS # 1)  
North Reference: True  
Survey Calculation Method: Minimum Curvature  
Database: EDM 5000.1 Single User Db

### Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)
2,460.0	9.27	46.78	2,439.7	276.7	182.9	207.6	0.20	0.20	-0.09
2,505.0	9.16	45.47	2,484.1	283.9	187.9	212.8	0.53	-0.24	-2.91
2,551.0	8.92	45.46	2,529.6	291.1	193.0	217.9	0.52	-0.52	-0.02
2,597.0	8.70	46.69	2,575.0	298.1	197.9	223.0	0.63	-0.48	2.67
2,641.0	8.73	46.53	2,618.5	304.8	202.4	227.8	0.09	0.07	-0.36
2,687.0	8.66	49.77	2,664.0	311.7	207.1	233.0	1.08	-0.15	7.04
2,732.0	9.05	54.65	2,708.5	318.6	211.3	238.5	1.88	0.87	10.84
2,776.0	8.96	54.43	2,751.9	325.5	215.3	244.1	0.22	-0.20	-0.50
2,822.0	9.18	53.50	2,797.3	332.7	219.6	250.0	0.57	0.48	-2.02
2,868.0	9.98	54.38	2,842.7	340.3	224.1	256.2	1.77	1.74	1.91
2,914.0	9.89	58.42	2,888.0	348.2	228.5	262.8	1.53	-0.20	8.78
2,959.0	10.20	56.58	2,932.3	355.9	232.7	269.4	0.99	0.69	-4.09
3,003.0	10.14	53.75	2,975.6	363.7	237.1	275.7	1.14	-0.14	-6.43
3,049.0	10.15	51.70	3,020.9	371.7	242.0	282.2	0.79	0.02	-4.46
3,095.0	10.46	49.90	3,066.2	380.0	247.2	288.6	0.97	0.67	-3.91
3,139.0	9.76	46.60	3,109.5	387.7	252.4	294.3	2.06	-1.59	-7.50
3,185.0	9.45	44.89	3,154.8	395.4	257.7	299.8	0.92	-0.67	-3.72
3,230.0	9.54	45.11	3,199.2	402.8	263.0	305.1	0.22	0.20	0.49
3,276.0	10.15	46.60	3,244.5	410.6	268.4	310.7	1.44	1.33	3.24
3,322.0	10.46	45.64	3,289.8	418.8	274.1	316.7	0.77	0.67	-2.09
3,368.0	11.16	47.26	3,335.0	427.5	280.1	322.9	1.66	1.52	3.52
3,414.0	11.78	48.41	3,380.1	436.6	286.2	329.7	1.44	1.35	2.50
3,457.0	12.04	50.47	3,422.1	445.5	292.0	336.4	1.16	0.60	4.79
3,503.0	12.17	50.34	3,467.1	455.1	298.1	343.9	0.29	0.28	-0.28
3,549.0	11.69	51.26	3,512.1	464.6	304.2	351.2	1.12	-1.04	2.00
3,595.0	11.56	52.93	3,557.2	473.9	309.8	358.6	0.78	-0.28	3.63
3,641.0	11.87	54.03	3,602.2	483.2	315.4	366.1	0.83	0.67	2.39



# Payzone Directional

## End of Well Report



Sundry Number: 58232 API Well Number: 43013528590000

**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 17 T9, R16  
**Well:** O-17-9-16  
**Wellbore:** Wellbore #1  
**Design:** Actual

**Local Co-ordinate Reference:** Well O-17-9-16  
**TVD Reference:** O-17-9-16 @ 6091.0usft (SS # 1)  
**MD Reference:** O-17-9-16 @ 6091.0usft (SS # 1)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 5000.1 Single User Db

Survey	MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)
	3,686.0	11.25	56.05	3,646.3	492.1	320.6	373.4	1.65	-1.38	4.49
	3,732.0	10.37	54.29	3,691.5	500.7	325.5	380.5	2.04	-1.91	-3.83
	3,778.0	9.71	51.35	3,736.8	508.7	330.3	386.9	1.82	-1.43	-6.39
	3,824.0	9.32	48.23	3,782.2	516.3	335.2	392.7	1.41	-0.85	-6.78
	3,868.0	8.92	47.22	3,825.6	523.3	339.9	397.9	0.98	-0.91	-2.30
	3,913.0	8.57	44.32	3,870.1	530.1	344.7	402.8	1.25	-0.78	-6.44
	3,957.0	8.39	42.25	3,913.6	536.6	349.4	407.2	0.81	-0.41	-4.70
	4,003.0	8.88	40.67	3,959.1	543.4	354.6	411.8	1.18	1.07	-3.43
	4,049.0	9.27	43.22	4,004.5	550.6	360.0	416.7	1.22	0.85	5.54
	4,095.0	9.18	44.19	4,049.9	558.0	365.3	421.8	0.39	-0.20	2.11
	4,140.0	9.14	46.30	4,094.3	565.1	370.4	426.8	0.75	-0.09	4.69
	4,186.0	9.10	48.98	4,139.7	572.4	375.3	432.2	0.93	-0.09	5.83
	4,232.0	8.77	49.24	4,185.2	579.5	380.0	437.6	0.72	-0.72	0.57
	4,276.0	8.66	48.27	4,228.7	586.2	384.4	442.6	0.42	-0.25	-2.20
	4,321.0	8.61	48.71	4,273.2	593.0	388.8	447.7	0.18	-0.11	0.98
	4,367.0	8.75	47.39	4,318.6	599.9	393.5	452.9	0.53	0.30	-2.87
	4,413.0	8.83	47.09	4,364.1	606.9	398.2	458.0	0.20	0.17	-0.65
	4,459.0	9.32	46.16	4,409.5	614.2	403.2	463.3	1.11	1.07	-2.02
	4,504.0	9.62	46.96	4,453.9	621.6	408.3	468.7	0.73	0.67	1.78
	4,548.0	9.89	49.02	4,497.3	629.0	413.3	474.2	1.00	0.61	4.68
	4,592.0	9.89	49.86	4,540.6	636.6	418.2	480.0	0.33	0.00	1.91
	4,638.0	9.62	49.33	4,586.0	644.4	423.3	485.9	0.62	-0.59	-1.15
	4,684.0	9.80	49.50	4,631.3	652.1	428.3	491.8	0.40	0.39	0.37
	4,728.0	9.89	48.32	4,674.7	659.7	433.3	497.5	0.50	0.20	-2.68
	4,774.0	9.76	49.06	4,720.0	667.5	438.4	503.3	0.39	-0.28	1.61
	4,820.0	9.40	50.03	4,765.3	675.2	443.4	509.2	0.86	-0.78	2.11
	4,865.0	8.79	49.33	4,809.8	682.3	448.0	514.6	1.38	-1.36	-1.56

# Payzone Directional

## End of Well Report



**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 17 T9, R16  
**Well:** O-17-9-16  
**Wellbore:** Wellbore #1  
**Design:** Actual

**Local Co-ordinate Reference:** Well O-17-9-16  
**TVD Reference:** O-17-9-16 @ 6091.0usft (SS # 1)  
**MD Reference:** O-17-9-16 @ 6091.0usft (SS # 1)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 5000.1 Single User Db

### Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)
4,911.0	8.38	46.74	4,855.3	689.2	452.6	519.7	1.22	-0.89	-5.63
4,957.0	8.44	45.15	4,900.8	695.9	457.3	524.5	0.52	0.13	-3.46
5,003.0	8.53	45.15	4,946.3	702.6	462.1	529.3	0.20	0.20	0.00
5,049.0	8.70	45.68	4,991.7	709.5	466.9	534.3	0.41	0.37	1.15
5,093.0	8.61	47.53	5,035.2	716.1	471.4	539.1	0.66	-0.20	4.20
5,138.0	9.01	47.70	5,079.7	723.0	476.1	544.2	0.89	0.89	0.38
5,184.0	9.23	46.74	5,125.1	730.3	481.0	549.5	0.58	0.48	-2.09
5,230.0	9.58	50.47	5,170.5	737.8	486.0	555.1	1.53	0.76	8.11
5,276.0	9.76	54.07	5,215.9	745.5	490.7	561.3	1.37	0.39	7.83
5,322.0	9.98	53.37	5,261.2	753.4	495.4	567.6	0.54	0.48	-1.52
5,368.0	10.06	54.03	5,306.5	761.4	500.1	574.1	0.30	0.17	1.43
5,413.0	9.80	52.89	5,350.8	769.1	504.8	580.3	0.72	-0.58	-2.53
5,459.0	9.62	47.35	5,396.1	776.8	509.7	586.2	2.07	-0.39	-12.04
5,505.0	9.10	45.59	5,441.5	784.3	514.9	591.7	1.29	-1.13	-3.83
5,551.0	8.57	46.38	5,487.0	791.4	519.8	596.8	1.18	-1.15	1.72
5,597.0	8.53	46.74	5,532.5	798.2	524.5	601.7	0.15	-0.09	0.78
5,642.0	8.67	46.78	5,577.0	804.9	529.1	606.6	0.31	0.31	0.09
5,688.0	8.75	47.75	5,622.4	811.9	533.8	611.7	0.36	0.17	2.11
5,734.0	9.01	46.47	5,667.9	819.0	538.7	616.9	0.71	0.57	-2.78
5,780.0	8.83	47.22	5,713.3	826.1	543.5	622.1	0.47	-0.39	1.63
5,826.0	8.83	46.34	5,758.8	833.2	548.4	627.3	0.29	0.00	-1.91
5,871.0	8.92	46.21	5,803.2	840.1	553.2	632.3	0.20	0.20	-0.29
5,917.0	8.79	49.42	5,848.7	847.2	557.9	637.5	1.11	-0.28	6.98
5,963.0	9.05	51.31	5,894.1	854.3	562.5	643.0	0.85	0.57	4.11
6,009.0	9.45	49.68	5,939.5	861.7	567.2	648.7	1.04	0.87	-3.54
6,052.0	9.10	50.16	5,982.0	868.6	571.6	654.0	0.83	-0.81	1.12
6,098.0	8.17	48.41	6,027.5	875.6	576.1	659.3	2.10	-2.02	-3.80





Payzone Directional  
End of Well Report



Sundry Number: 58232 API Well Number: 43013528590000

Company:	NEWFIELD EXPLORATION	Local Co-ordinate Reference:	Well O-17-9-16
Project:	USGS Myton SW (UT)	TVD Reference:	O-17-9-16 @ 6091.0usft (SS # 1)
Site:	SECTION 17 T9, R16	MD Reference:	O-17-9-16 @ 6091.0usft (SS # 1)
Well:	O-17-9-16	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	EDM 5000.1 Single User Db

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)
6,142.0	7.69	45.15	6,071.0	881.6	580.3	663.7	1.49	-1.09	-7.41
6,188.0	7.43	42.47	6,116.6	887.6	584.7	667.9	0.95	-0.57	-5.83
6,202.0	7.34	41.77	6,130.5	889.4	586.0	669.1	0.91	-0.64	-5.00
6,257.0	7.34	41.77	6,185.1	896.4	591.2	673.8	0.00	0.00	0.00

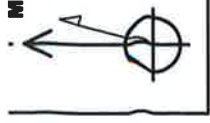
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Approved By: \_\_\_\_\_

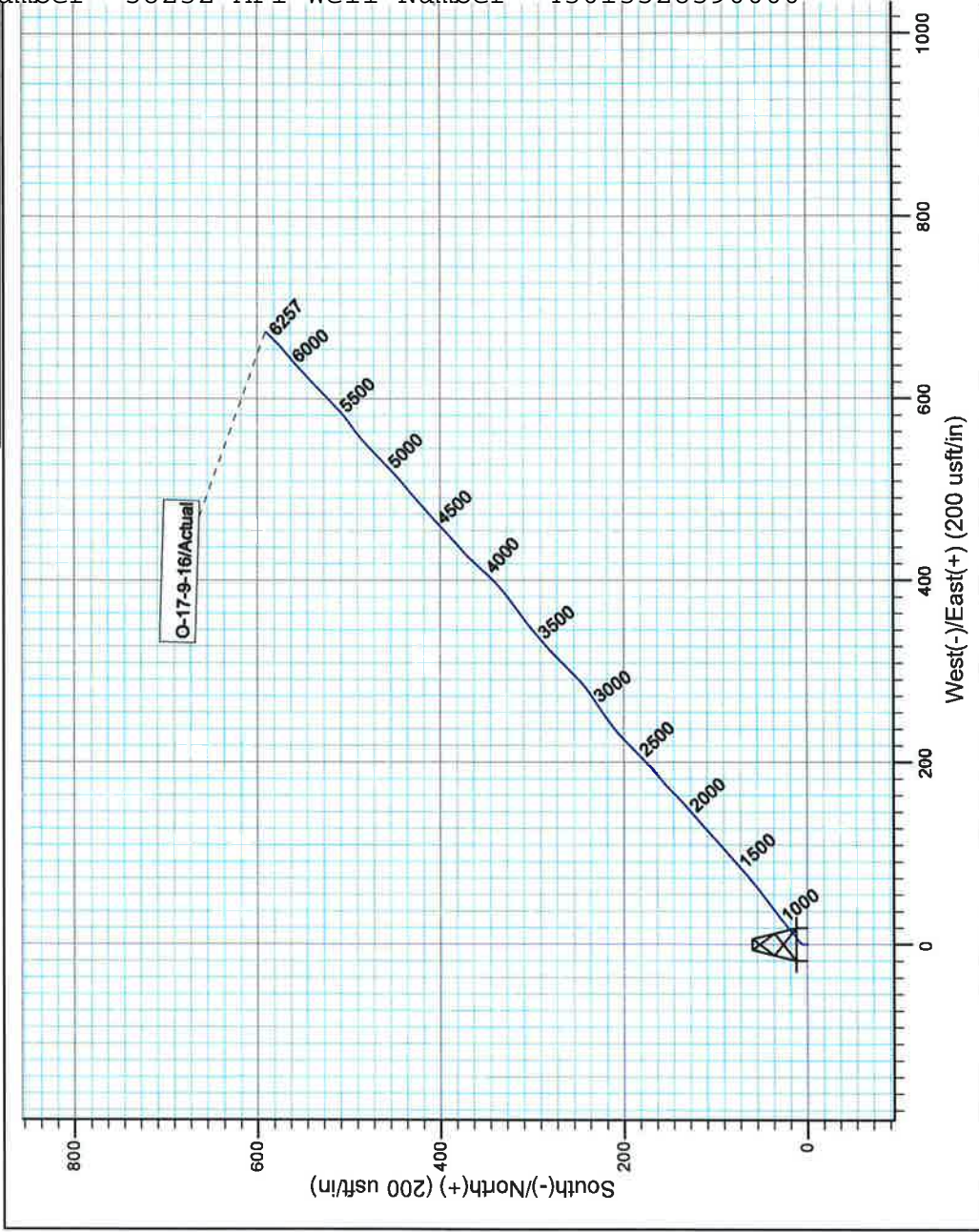
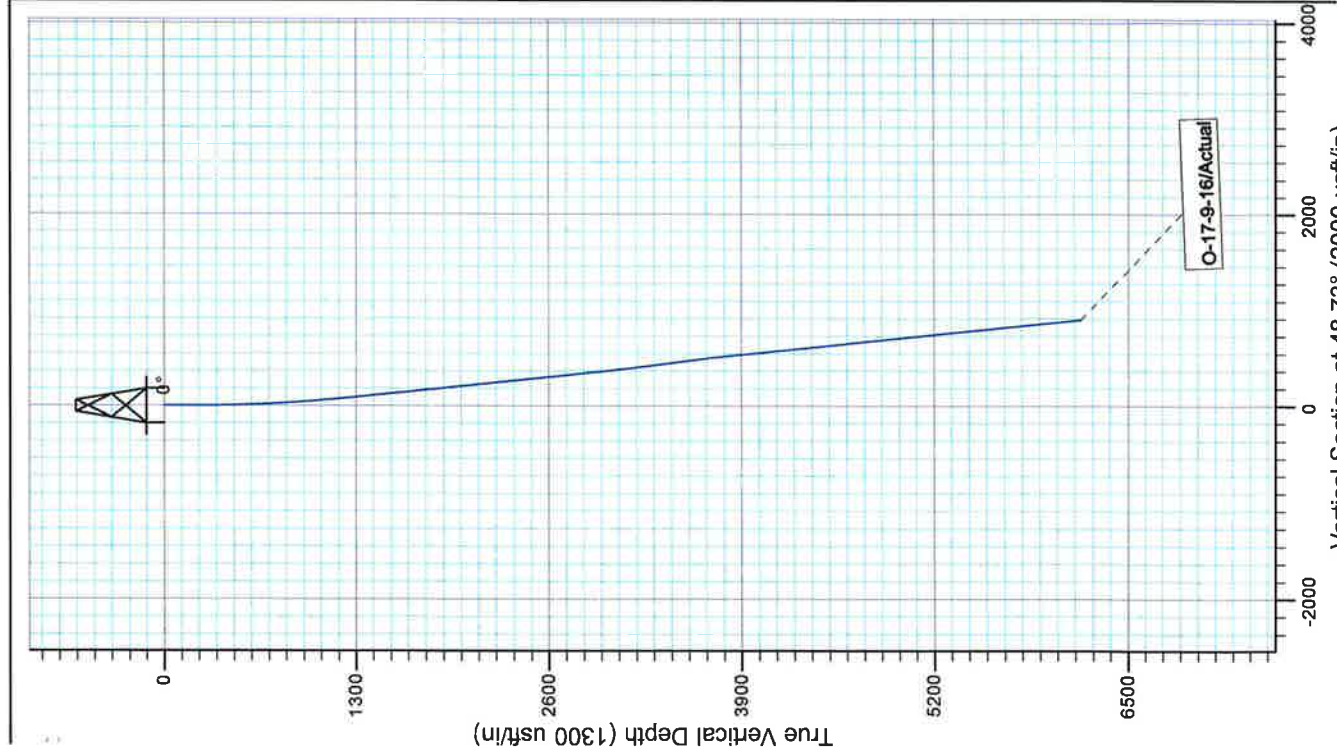
Date: \_\_\_\_\_



Project: USGS Myton SW (U1)  
Site: SECTION 17 T9, R16  
Well: O-17-9-16  
Wellbore: Wellbore #1  
Design: Actual



Adjustment to true north  
Magnetic North: 10.92°  
Magnetic Field  
Strength: 51916.8 nT  
Dip Angle: 85.88°  
Date: 10/10/2014  
Model: IGRF2010



Design: Actual (O-17-9-16/Wellbore #1)

Created By: *Matthew Linton* Date: 7:55, October 20 2

THIS SURVEY IS CORRECT TO THE BEST OF  
MY KNOWLEDGE AND IS SUPPORTED  
BY ACTUAL FIELD DATA



Well Name: GMBU O-17-9-16

## Summary Rig Activity

Sundry Number: 58232 API Well Number: 43013528590000

Job Category	Job Start Date	Job End Date

Daily Operations			
Report Start Date	Report End Date	24hr Activity Summary	
10/31/2014	11/1/2014	Run CBL. Press test BOPs. Perforate 1st Stage	
Start Time	06:00	End Time	08:30
Comment: RU EXTREME WIRELINE, MU & RIH W/ CEMENT BOND LOG TOOLS, TAG @ 6150', PBTD @ 6200', LOG WELL W/ 0 PSI, LOG SHORT JOINT @ 3504-3515', ESTIMATED CEMENT TOP @ SURFACE LD LOGGING TOOLS, SWI			
Start Time	08:30	End Time	11:00
Comment: RU B&C QUICK TEST. TEST UNIT, TEST HYD CHAMBERS ON BOPS, TEST CSG, FRAC STACK & ALL COMPONENTS TO 250 PSI 5-MIN LOW & 4300 PSI 10 & 30-MIN HIGHS, ALL GOOD			
Start Time	11:00	End Time	12:00
Comment: MU & RIH W/ 3 1/8" DISPOSABLE SLICK GUNS (.34 EHD, 16 GR CHG, 21" PEN, 2 SPF), PERFORATE CP-3 FORMATION @ 5805-08', 5793-94', & CP-2 @ 5752-53', & 5707-08', (12 HOLES), POOH W/WIRELINE, LD PERF GUNS, SWI, RD WIRELINE			
Start Time	12:00	End Time	00:00
Comment: SDFN			
Report Start Date	Report End Date	24hr Activity Summary	
11/3/2014	11/4/2014	Frac & Flow back well Set KP	
Start Time	00:00	End Time	04:00
Comment: SDFN			
Start Time	04:00	End Time	07:00
Comment: RU Nabors Frac. Press test Lines & Pump To 5000psi			
Start Time	07:00	End Time	07:30
Comment: (Stg #1 17#) Frac CP-1/2/3 Formations W/ 79,000 20/40 white sand & 785 bbls pumped ISIP 1979 psi w/ .78 FG			
Start Time	07:30	End Time	08:15
Comment: (Stg #2) RU Extreme wireline, Press test lube to 4,000 psi, MU RIH w/ 3 1/8" disposable slick guns (.34 EHD, 120 deg phasing, 16 gram charges, 2 spf), Set CFT Plug @ 5420' Perforate LODC Formation @ 5343-47', 5257-58', 5243-5244', (12-Holes)', POOH RD wireline, SWI			
Start Time	08:15	End Time	08:45
Comment: (Stg #2 17# Frac) Frac LODC W/99,000# 20/40 white sand & pump 901 total bbls. ISIP 2208 psi W/ .85 FG			
Start Time	08:45	End Time	09:30
Comment: (Stg #3) RU The Extreme wireline, Press test lube to 4,000 psi, MU RIH W/ CFTP & 3 1/8" disposable slick guns (.34 EHD, 180 deg phasing, 16 gram charges, 2 spf), Set CFT Plug @ 5210' & Perforate the A-1 Formation @ 5156-59', 5148-49', 5142-43', 5118-21', & A-Half @ 5090-92', B-1 @ 5005-06', (22-Holes) POOH RD wireline, SWI			
Start Time	09:30	End Time	10:00
Comment: (Stg #3 17# Frac) A-1, A-Half & B-1 formations W/ 73,000# 20/40 White Sand & pump 731 total bbls ISIP 1964 psi W/.82 FG			
Start Time	10:00	End Time	10:45
Comment: (Stg #4) RU Extreme wireline, Press test lube to 4,000 psi, MU RIH w/ 3 1/8" disposable slick guns (.34 EHD, 180 deg phasing, 16 gram charges, 3 spf), Set CFT Plug @ 4840' Perforate D-1 Formation @ 4759-61', 4754-56', (12-Holes)', POOH RD wireline, SWI			
Start Time	10:45	End Time	11:15
Comment: (Stg #4 17# Frac) D-1 formations W/17,758# 20/40 White Sand & pump 344 total bbls ISIP 1857 psi W/.82 FG			
Start Time	11:15	End Time	12:00
Comment: (Stg #5) RU Extreme wireline, Press test lube to 4,000 psi, MU RIH w/ 3 1/8" disposable slick guns (.34 EHD, 180 deg phasing, 16 gram charges, 2 spf), Set CFT Plug @ 4370' Perforate GB-6 Formation @ 4290-94', 4239-40', & The GB-4 @ 4221-22', (12-Holes)', POOH RD wireline, SWI			



NEWFIELD



## Summary Rig Activity

Well Name: GMBU O-17-9-16

Start Time	12:00	End Time	12:30	Comment	( Stg #5 17# Frac) GB-4/6 formations W/75,627# 20/40 White Sand & pump 690 total bbls ISIP 1736 psi W/ .84 FG	
Start Time		End Time		Comment		
Start Time	12:30	End Time	15:30	Comment		
Start Time	15:30	End Time	16:30	Comment		
Start Time	16:30	End Time	20:30	Comment		
Start Time	20:30	End Time	00:00	Comment	Move rig to O-17-9-16 Spot in rig up. N.D. frac valve N.U. BOP's. Change over to TBG equip. Build pump lines. Shut well in SDFN.	
Start Time	20:30	End Time	00:00	Comment	SDFN	
Report Start Date		Report End Date	24hr Activity Summary			
11/4/2014		11/5/2014	MIRU Rig Press Test BOPs Clean Out Well			
Start Time	00:00	End Time	06:00	Comment	SDFN	
Start Time	06:00	End Time	07:00	Comment	CREW TRAVEL, JSA, JSP, SAFETY MEETING, FUEL & START EQUIP.	
Start Time	07:00	End Time	08:30	Comment	UNLOAD, PREP & TALLY TBG, NUJ TEST SUB & TEST BOP'S (GOOD TEST).	
Start Time	08:30	End Time	10:30	Comment	M/U & RIH W/ BIT, BIT SUB, 1-JNT 2 7/8" J-55 TBG, S/N, - JNTS 2 7/8" J-55 TBG & TAG FILL ON JNT123 @4040'	
Start Time	10:30	End Time	16:00	Comment	SIRU SWIVEL, CLEAN OUT FILL TO KP 9' IN ON JNT 125 @4120' (22 MINS TO DRILL PLUG, 80' OF FILL, 600 PSI UNDER PLUG), RIH TO F/T PLUG #1 6' OUT ON JNT 132 @4370' (NO FILL, 13 MINS TO DRILL PLUG), RIH TO F/T PLUG #2 2' OUT ON JNT 146 @4840' (NO FILL, 14 MINS TO DRILL PLUG), RIH TO F/T PLUG #3 6' IN ON JNT 158 @5210' (NO FILL, 14 MINS TO DRILL PLUG), RIH & TAG CONE FROM PLUG @5750' CONE GOT JNT 164 @5420' (NO FILL, 11 MINS TO DRILL PLUG), RIH & TAG CONE FROM PLUG @5750' CONE GOT STUCK ON BIT & WE COULDN'T PUMP DOWN TBG. WE WORKED TBG UP & DWN WITH SWIVEL & KEPT HANGING UP & PULLING OVER BUT COULDN'T PUMP DWN TBG. R/D SWIVEL & PULL 5-JNTS TO WIPE CONE OFF BIT. AFTER COMING FREE SWIVELED IN REMAINING JNTS WHILE PUMPING TO KEEP CONE FROM STICKING TO BIT UNTIL WE TAGGED FILL @5800'. STARTED CLEANING OUT FILL & BOLT BROKE ON WASHINGTON HEAD.	
Start Time	16:00	End Time	17:00	Comment	CIRCULATE WELLBORE CLEAN WHILE TRYING TO FIND NEW BOLT FOR WASH. HEAD.	
Start Time	17:00	End Time	17:30	Comment	R/D SWIVEL, L/D 5-JNTS 2 7/8" J-55 TBG, SIW, WINTERIZE PUMP & HARDLINE.	
Start Time	17:30	End Time	18:30	Comment	CREW TRAVEL	
Start Time	18:30	End Time	00:00	Comment	SDFN	
Report Start Date		Report End Date	24hr Activity Summary			
11/5/2014		11/5/2014	Trip Tbg RIH W/ Rods			
Start Time	00:00	End Time	06:00	Comment	SDFN	



Well Name: GMBU O-17-9-16

## Summary Rig Activity

Sundry Number: 58232 API Well Number: 43013528590000

Start Time	06:00	End Time	07:00	Comment CREW TRAVEL, JSA, JSP, SAFETY MEETING, FUEL & START EQUIP.
Start Time	07:00	End Time	09:00	Comment CHECK PRESSURES, (250 PSI ON TBG & CSNG), RIH W/ 5-JNTS 2 7/8" J-55 TBG (NO FILL OVERNIGHT), R/U SWIVEL, FINISH CLEANING OUT FILL FROM 5837' TO 6200' PBTD
Start Time	09:00	End Time	10:00	Comment CIRCULATE 190 BBLs UNTIL WELLBORE WAS CLEAN (WELL KEPT HEAVING IN SAND)
Start Time	10:00	End Time	11:30	Comment R/D SWIVEL, L/D 9-JNTS 2 7/8" J-55 TBG (14 TOTAL ON RACKS), TOOH W/ 178-JNTS 2 7/8" J-55 TBG, L/D BIT & BIT SUB.
Start Time	11:30	End Time	13:00	Comment M/U & TIH W/ PURGE VALVE (.87'), 2-JNTS 2 7/8" J-55 TBG (66.32'), #3 DESANDER (17.12'), 2 7/8" X 4' J-55 TBG SUB (4.10'), 1-JNT 2 7/8" J-55 TBG (33.12'), PSN (1.10' @5810.52'), 1-JNT 2 7/8" J-55 TBG (33.12'), 5 1/2' TAC (2.80' @5774.6'), 174-JNTS 2 7/8" J-55 TBG 5760.8'), M/U 4' SUB, HNGR (.90'), SET TAC FROM RIG FLOOR FOR 18K TENSION, STRETCH (22.89", 1.90'), LAND WELL EOT @5933.15')
Start Time	13:00	End Time	14:00	Comment R/D WORKFLOOR, N/D BOP'S, UNLAND WELL, REMOVE 4' SUB, LAND WELL, N/U WELLHEAD & F/L
Start Time	14:00	End Time	14:30	Comment X-OVER FOR RODS, LOAD TBG EQUIP, S/I ROD TRAILER, WRAP BOP HOSES & R/O BOP'S.
Start Time	14:30	End Time	17:00	Comment P/U & STROKE NEW WEATHERFORD PUMP #4221 2.5-1.75-20-22-22 RHAC, RIH W/ PUMP, 30-7/8" 8 PERS, 119-3/4" 4 PERS, 81- 7/8" 4 PERS, S/O W/ 1-2", 1-4", & 1-6' X 7/8" PONIES, P/U 1 1/2" X 30' POLISH ROD.
Start Time	17:00	End Time	17:30	Comment STROKE W/ RIG TO 800 PSI (GOOD TEST), HANG HEAD, PULL UP 12" OFF DBL TAG & CLAMP. ADJUST HEAD & BRIDLE.
Start Time	17:30	End Time	18:00	Comment R/D WRAP LINES, ADJUST HEAD TO MAX RIGHT SIDE (BRIDLE STILL RIDING EDGE) PWOP 144" S/L @ 5 SPM
Start Time	18:00	End Time	19:00	Comment CREW TRAVEL